

# U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

National Policy

ORDER 8020.11C

Effective Date: 02/02/2010

# 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 provides direction and guidance to aviation safety inspectors when they are called upon to perform accident investigation. It also explains the responsibilities of the FAA and the National Transportation Safety Board when conducting investigations. The order is also used as a training guide for teaching accident investigation courses at the National Aircraft Accident Investigation School, Transportation Safety Institute, Oklahoma City, Oklahoma. 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.

andolph Babbitt Administrator

# **Table of Contents**

Chapter 1. General Information		
1.	Purpose of This Order	1-1
2.	Audience	1-1
3.	Where Can I Find This Order	1-1
4.	What This Order Cancels	1-1
5.	Explanation of Changes	1-1
6.	Definitions	1-1
7.	Forms and Reports	1-7
8.	Authority To Change This Order	1-7
9.	FAA Responsibilities in Aircraft Accident Investigations	1-7
10.	Responsibilities of Regional Divisions and Aircraft Certification	
	Directorates in Aircraft Accident Investigations	1-9
11.	FAA and NTSB Accident and Incident Investigation Agreements	1-9
12.	Post-Accident or Incident Drug Testing	1-10
13.	FAA Investigator-In-Charge (IIC)	1-10
14.	FAA Participants	1-10
15.	Other FAA Personnel	1-10
16.	FAA Safety Recommendation Program	1-11
17.	Training	1-12
18.	Regional Supplements	1-13
19.	Distribution	1-13

# Chapter 2. FAA Elements Involved in Notification, Investigation, and Reporting

1.	Office of Accident Investigation	2-1
2.	Operations Centers	2-3
3.	Air Traffic Organization	2-3
4.	Flight Standards Service	2-4
5.	Office of Aerospace Medicine	2-6
6.	Office of Airport Safety and Standards	2-6
7.	Office of the Chief Counsel	2-6
8.	Assistant Administrator for Security and Hazardous Materials	2-6
9.	Aircraft Certification Service	2-6
10.	Office of Communications	2-7
11.	Office of International Aviation	2-7
12.	Office of Commercial Space Transportation	2-7

### Chapter 3. Aircraft Accident Investigation Responsibilities

### Section 1. Air Traffic

1.	General		3-1

<ol> <li>Air Traffic Accident Representative</li> <li>Air Traffic Accident Representative Responsibilities</li> </ol>	3-1 3-1
Section 2. Office of Accident Investigation and Flight Standards	
<ol> <li>Office of Accident Investigation Responsibilities</li> <li>Regional Flight Standards Division Responsibilities</li> <li>Designation of the FAA IIC</li> <li>Principal Air Carrier Inspector Responsibilities</li> <li>Possible Involvement of Navigation Facilities</li> <li>Technical Operations Aviation System Standards Responsibilities</li> <li>Washington Headquarters "Go Team"</li> <li>FAA Safety Team Program Manager</li> </ol>	3-3 3-3 3-3 3-3 3-4 3-4 3-4 3-5
Section 3. Office of Aerospace Medicine	
<ol> <li>Purpose</li> <li>Scope</li> <li>Notification</li> <li>Responsibilities</li> <li>Regional Flight Surgeon Responsibilities</li> <li>Civil Aerospace Medical Institute Responsibilities</li> </ol>	3-6 3-6 3-6 3-6 3-7 3-7
Section 4. Office of Airport Safety and Standards	
<ol> <li>Responsibilities</li> <li>Regional Airports Division Responsibilities</li> </ol>	3-9 3-10
Section 5. Office of the Chief Counsel	
<ul> <li>20. General</li> <li>21. Extent of Legal Participation</li> <li>22. Investigations Requiring Full Legal Participation</li> <li>23. Designation Of Legal Representative</li> <li>24. Legal Representative Responsibilities</li> </ul>	3-11 3-11 3-11 3-11 3-11

# Chapter 4. Accident Investigation, Reporting, and Quality Assurance Program

# Section 1. Investigation Guidelines and Quality Assurance Program

1.	General	4-1
2.	National Transportation Safety Board (NTSB)	4-1
3.	Extent Of Investigation	4-1
4.	FAA IIC Responsibilities	4-2
5.	FAA Participant Responsibilities	4-4

	FAA IIC Initial Actions	4-5
	Arrival at Accident Scene	4-6
8.	When NTSB is in Charge, but FAA Inspector Arrives First	4-6
9.	Accident Scene Access	4-7
10.	Organization and Conduct of the Field Investigation	4-8
11.	NTSB Team Concept	4-12
12.	Investigation Equipment	4-12
13.	Investigator Safety	4-12
14.	Airman And Aircraft Records	4-14
15.	Post-Accident and Incident Drug Testing	4-14
16.	Airworthiness Investigations	4-14
17.	Crashworthiness Investigations	4-15
18.	Public Aircraft	4-16
19.	Ultralight Vehicles	4-17
20.	Release of Information	4-17
21.	Coordination with other FAA Offices	4-17
22.	Cooperation with States, Agencies, and Others	4-17
23.	Investigation Conclusion	4-18
24.	Registration Certificates	4-18
25.	Aircraft Data Plates	4-19
26.	FAA Deficiencies	4-19
27.	Design Deficiencies	4-19
28.	Accident Investigation Quality Assurance Program	4-19
29.	Quality Assurance Program Objectives	4-19
30.	Quality Assurance Data	4-20
31.	Completion and Distribution of FAA Form 8020-23 (For Accidents)	4-20
	Accident Investigation Quality Assurance Awards Program	4-21
Sec	tion 2. Accident Investigation Forms and Reports	

33. FAA IIC Reporting Responsibilities	4-22
34. Progress Reports	4-23
35. FAA Participant Reporting Responsibilities	4-23
36. FAA Form 8020-2, Aircraft/Parts Identification and Release	4-24
37. FAA Form 8020-23, FAA Accident/Incident Report	4-25
38. NTSB Form 6120.15, Release Of Aircraft Wreckage and Receipt of	
Aircraft Parts	4-26
39. NTSB Form 6120.9, Passenger Statement; and NTSB Form 6120.11,	
Statement Of Witness	4-26
40. NTSB Form, Preliminary Accident Report	4-27
41. NTSB Form 6120.1/2, Pilot/Operator Aircraft Accident Report	4-27
42. Report Retention	4-27

# Chapter 5. Incident Investigation and Reporting

### Section 1. General

2. 3. 4. 5.	Overview Incident Responsibilities Incident Notification Foreign Air Carrier Incidents Report Retention Records Disposal	5-1 5-1 5-2 5-3 5-3 5-4
See	ction 2. Investigation of Specific (Non-Criminal Incidents)	
	Near Midair Collisions (NMAC) Hazardous Air Traffic Reports (HATR) and Operational Hazard	5-5
	Reports (OHR)	5-6
	Pilot Deviations	5-7
	Vehicle And Pedestrian Deviations	5-7
	Emergency Evacuations	5-8
	Parachute Jumping	5-9 5-9
	Forcible Seizure Of Aircraft (Hijack) Hazardous Materials	5-9
	Sonic Boom Complaints	5-10
	Complaints of Noise Or Damage Allegedly Caused By Civil Aircraft	5-11
	Unidentified Flying Object (UFO)	5-11
See	ction 3. Criminal Incidents	
	Statutory Provisions	5-12
19.	Handling of Possible Criminal Incidents	5-12
See	ction 4. FAA Form 8020-23, Aircraft Accident/Incident Report	
20.	General	5-14
	Preparation of FAA Form 8020-23 (For Incidents)	5-14
	Distribution of FAA Form 8020-23 (For Incidents)	5-14
Ch	apter 6. Military Accident or Incident Investigations	
1.	FAA Participation	6-1
2.	Types of Investigations	6-1
3.	Investigation Arrangements	6-2
4.	5	6-2
5.	Assignment of FAA Personnel	6-2

6. Participation of FAA Personnel6-2

7.	Treatment of Testimony	6-3
8.	Military Assistance In FAA Investigations of Military Aircraft Mishaps	6-3
9.	Responsibilities of The Director of A Military Safety Center	6-4
10	. FAA Requests for Military Aircraft Mishap Information	6-4
11	. Suspected Sabotage or Other Criminal Acts	6-4
Ch	apter 7. Foreign Accidents or Incidents	
1.	Responsibility for International Areas	7-1
	Invitation or Request for U.S. Participation in Foreign Investigations	7-1
	Foreign Investigation Assignments	7-2
	Reports on Foreign Investigations	7-2
	Foreign Civil Aircraft Accidents or Incidents in the United States	7-3
6.	Corrective Actions	7-3
Ch	apter 8. National Transportation Safety Board (NTSB) Accident	
a	nd Incident Hearings and Depositions	
	General	8-1
	Hearing and Deposition Scheduling	8-1
	FAA Spokesperson(S)	8-1
	FAA Representation at Prehearing Conferences and Hearings	8-1
	Depositions	8-2
	FAA Employees as Witnesses at NTSB Hearings and Depositions	8-2
/.	Exhibits and Transcripts	8-3
Ch	apter 9. Public Release of Accident and Incident information	
1.	General	9-1
2.	NTSB-Conducted Investigations	9-1
	Military Aircraft Information	9-1
	Information That May Be Released By FAA	9-1
5.	FAA Office of Communications Releases During Investigations	9-2
6.	Air Traffic Recordings and Transcripts	9-3
	Public Request for Reports	9-3
8.	FOIA Request for Accident or Incident Investigation Documents	9-4
Ch	apter 10. Accident Investigation Bloodborne Pathogens Exposure Control Program	
1	Comoral	10.1

General	10-1
Background	10-1
Training	10-1
HBV Vaccination	10-2
Personal Protective Equipment	10-3
Records	10-3
Responsibilities	10-3
	Background Training HBV Vaccination Personal Protective Equipment Records

Forms		10-7
Figure 10-1.	FAA Exposure Control Plan	10-8
Figure 10-2.	Exposure Determination List	10-19
Figure 10-3.	Hepatitis B Virus (HBV) Vaccination Consent/Decline	
	Form (FAA Form 8020-22)	10-20
Figure 10-4.	FAA Mishap Report (FAA Form 3900-6)	10-23
Figure 10-5.	Bloodborne Pathogens Exposure Incident Evaluation	10-25
Figure 10-6.	Site Survey Checklist	10-26
Figure 10-7.	Entry/Exit Equipment	10-27
Figure 10-8.	Personal Protective Equipment	10-28
Figure 10-9.	Procedure for Disinfectant Selection	10-29
	Figure 10-1. Figure 10-2. Figure 10-3. Figure 10-4. Figure 10-5. Figure 10-5. Figure 10-6. Figure 10-7. Figure 10-8.	<ul><li>Figure 10-1. FAA Exposure Control Plan</li><li>Figure 10-2. Exposure Determination List</li><li>Figure 10-3. Hepatitis B Virus (HBV) Vaccination Consent/Decline</li></ul>

# Chapter 11. Commercial Space Mishap Notification, Response, and Investigation

# Section 1. General

1.	Overview	11-1
2.	Purpose, Scope and Objectives	11-1
3.	Definitions	11-1
4.	Other Identified Mishaps	11-3

# Section 2. Notification, Response, and Reporting Requirements

5.	Information Requirements	11-5
6.	Notification/Response Requirements	11-5
7.	Licensed and Permitted Operators	11-6
8.	Department of Defense and National Aeronautics and Space	
	Administration Ranges	11-6
9.	Associate Administrator for Commercial Space Transportation, AST-1	11-6
10.	Deputy Associate Administrator for Commercial Space	
	Transportation, AST-2	11-7
11.	Special Assistant for External Affairs, AST-5	11-7
12.	AST Mishap Response Coordinator	11-8
13.	AST Mishap Response Working Group	11-8
14.	AST Mishap Notification Response Team	11-9
15.	AST Compliance Monitor/Safety Inspector	11-9
16	AST Duty Officer	11-10
17.	AST Assistant Inspector/Duty Officer	11-11
18.	AST Compliance Monitoring and Inspection Team (CMIT) Leader	11-11
19.	Manager, Licensing and Safety Division, AST-200	11-12
20.	Deputy Manager, Licensing and Safety Division	11-15
21.	Manager, Systems Engineering and Training Division, AST-300	11-15
22.	Deputy Manager, Systems Engineering and Training Division, AST-300	11-17
23.	Washington Operations Center	11-17
24.	Cornerstone Regional Operations Centers	11-18
25.	AST Mishap Notification and Response Handbook	11-18

8020.11C

26. Reporting Requirements	
Section 3. Investigation	
<ul> <li>27. Responsibility</li> <li>28. AST Investigative Role</li> <li>29. AST Investigative Authority</li> <li>30. Procedures <ul> <li>Figure 11-1. Example of AST Mishap Report Worksheet</li> </ul> </li> </ul>	
Appendix 1. General Information for Aircraft Accident and Incident Notification, Investigation, and Reporting	,
Part 1. List of Current Forms	A-1
<ul><li>a. FAA Forms</li><li>b. NTSB Forms</li><li>c. Other Forms</li></ul>	A-2 A-4 A-4
Part 2. Military Aircraft Accident Information	
<ul><li>a. Military Safety Center Addresses</li><li>b. Message Format for FAA Participation in Investigation</li></ul>	A-5 A-6
Part 3. FAA and NTSB Maps	
<ul><li>a. FAA Flight Standards Service Regional Boundaries</li><li>b. FAA International Jurisdictions</li><li>c. NTSB Aviation Regional and Field Offices</li></ul>	A-7 A-8 A-9
Part 4. Aircraft Certification Directorates and Their Responsibilities	
<ul> <li>a. Transport Airplane Directorate (14 CFR 25)</li> <li>b. Small Airplane Directorate (14 CFR 23)</li> <li>c. Engine and Propeller Directorate (14 CFR 33 And 35)</li> <li>d. Rotorcraft Directorate (14 CFR 27 And 29)</li> <li>e. Geographical Responsibilities for Civil Aeronautical Product Certification in Foreign Countries</li> </ul>	A-10 A-11 A-15 A-16 A-16
Part 5. Investigation Equipment	A-18
Part 6. Form Used by Regional Airports Division:	
FAA Form 8020-25, Investigation of Vehicle or Pedestrian Deviation Report	A-20

# Appendix 2. Examples of Forms and Procedures Used by Flight Standards Service

# Part 1. Accident/Incident Investigation Forms

a. l	NTSB Form 6120.1/2, Pilot/Operator Aircraft Accident Report	A-2
b. 1	FAA Form 8020-2, Aircraft/Parts Identification and Release	A-14
c. l	FAA Form 8020-23, FAA Accident/Incident Report	A-15
d. l	FAA Form 8020-15, Investigation Of Near Midair Collision Report	A-17
e. l	FAA Form 8020-18, Investigation of Pilot Deviation Report	A-20
Part 2	. Other Procedures	
a. l	Example of Recommendation for Accident Prevention	A-23
b. 4	Accident and Incident Investigation Process for Flight Standards	A-24
Appendix	3. NTSB Regulations	
Part 1.	49 CFR 800 Appendixes, Request To the Secretary of the Department of Transportation to Investigate Certain Aircraft Accidents	A-2
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	A-3
Part 3.	49 CFR 831, Accident/Incident Investigation Procedures	A-6
Part 4.	49 CFR 854, Rules of Practice in Transportation; Accident/Incident Hearings and Reports	A-9

# 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 personnel who are called upon to 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 internet web site and within the FAA Office of Accident Investigation 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">https://employees.faa.gov/tools\_resources/orders\_notices</a> and <a href="https://www.faa.gov/about/office">https://www.faa.gov/about/office</a> org/headquarters offices/avs/offices/aai/orders forms.

**4. What This Order Cancels.** Order 8020.11B, Aircraft Accident and Incident Notification, Investigation, and Reporting, dated August 16, 2000, including Change 1, is canceled.

**5. Explanation of Changes.** This revision removes chapter guidance related to the Air Traffic Organization (ATO). The ATO procedures and responsibilities for aircraft accident and incident notification, investigation, and reporting are now located in FAA Order 8020.16.

**6. Definitions.** Definitions associated with FAA licensed commercial space activity can be found in Chapter 11. The following terms, as used in this order, are defined below:

**a.** Administrator - the Federal Aviation Administrator or any person that is delegated the authority of the Administrator.

**b.** Air Carrier - any person or organization who undertakes, whether directly or indirectly, or by lease or any other arrangement, to engage in air transportation and conducts operations in accordance with 14 Code of Federal Regulations (CFR) 121 and 135.

(1) Air Taxi - an aircraft operator who conducts operations for hire or compensation in accordance with 14 CFR 135 in an aircraft with 30 or fewer passenger seats and a payload capacity of 7,500 pounds or less. An air taxi operates on an on-demand basis and does not meet the "flight scheduled" qualifications of a commuter.

(2) Commuter - an air carrier operator operating under 14 CFR 135 that carries passengers on at least five round trips per week on at least one route between two or more points according to its published flight schedules that specify the times, day of the week, and places between which these flight are performed. The aircraft that a commuter operates has 9 or fewer passenger seats and a maximum payload capability of 7,500 pounds or less.

(3) Foreign Air Carrier - any person other than a citizen of the United States who undertakes, directly by lease or other arrangement, to engage in air transportation and conducts its operations within U.S. airspace in accordance with 14 CFR 129.

**c.** Aircraft - a device that is used or intended to be used for flight in the air. (For purposes of this order, ultralight vehicle accidents and incidents are not investigated as "aircraft.")

**d.** 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 until such time as all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage. All aspects of the exceptions to substantial damage (see "Substantial Damage") should be considered before making a final substantial damage determination that would classify the occurrence as an accident.

e. Airworthy - the aircraft must conform to its type certificate and be in condition for safe operation.

**f.** Armed Forces - the Army, Navy, Air Force, Marines, and Coast Guard of the United States, including their regular and reserve components and members serving without component status.

g. Civil Aircraft - any aircraft other than a public aircraft.

**h.** Civil Aircraft of the United States - any aircraft registered as provided in Title 49 United States Code.

**i. Destroyed Aircraft** - an aircraft damaged to the extent that it would be impracticable to return the aircraft to an airworthy condition.

**j. FAA Accident Advisor** - any FAA employee assigned to assist the U.S.-accredited representative during participation in an aircraft accident investigation being conducted by a foreign country.

**k.** FAA Contract Facility - FAA contract facilities (FCF), for the purpose of this order, are FAA contracted airport traffic control towers (ATCT), automated flight service stations (AFSS), and flight service stations (FSS) facilities.

**l. FAA Coordinator** - a job title assigned by the National Transportation Safety Board (NTSB) and military services to the FAA investigator-in-charge (IIC).

**m. FAA Accident Participants or FAA Participants** - those FAA personnel assigned to assist the FAA and NTSB IIC in an accident or incident investigation.

**n. FAA Aircraft** - aircraft that is owned, leased, under military bailment, rented by the FAA, or piloted by FAA personnel when in an official FAA capacity.

**o. FAA Investigator-In-Charge (IIC)** - the FAA inspector/investigator assigned to supervise and coordinate all FAA participants in an accident or incident investigation. In each aviation investigation, the FAA IIC is responsible for the management of all FAA resources at the scene and

for determining if the facts of the accident indicate that FAA responsibilities were involved in the occurrence.

p. Fatal Injury - any injury which results in death within 30-days of the accident.

**q. Hazardous Materials Incident** - an incident that occurs during transportation of the material (including loading, unloading, or temporary storage) in which, as a direct result of any hazardous material:

(1) A person is killed.

(2) A person received injuries requiring hospitalization.

(3) Estimated carrier or other property damage, or both, exceeds \$50,000.

(4) Fire, breakage, spillage, or suspected radioactive contamination occurs during shipment of radioactive materials.

(5) Fire, breakage, spillage, or suspected contamination occurs during shipment of etiologic agents.

(6) A situation exists that, in the judgment of the carrier, should be reported to the Department of Transportation (DOT) although the situation does not meet the criteria of paragraphs 5q(1) to 5q(5); e.g., a continuing danger to life exists at the incident scene.

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

**s.** Industrial Accident - an occurrence that meets the criteria for an aircraft accident, except that there was no intention of flight.

t. Industry Coordinator - the person approved by NTSB or FAA to represent the operator, association, or manufacturer who possesses technical knowledge or expertise necessary to contribute to the accident investigation.

#### u. Light Sport Aircraft -

(1) Experimental Light Sport Aircraft - ELSA — An aircraft that does not meet the definition of Part 103; has been assembled from an aircraft kit produced by a light sport aircraft manufacturer. Kits assembled under this category are not required to meet the 51 percent homebuilt regulation.

(2) Special Light Sport Aircraft - SLSA — These are aircraft manufactured in accordance with industry consensus standards (ASTM) as a light sport aircraft in the United States or in a foreign country in accordance with 14 CFR 21.190 and sold as ready-to-fly aircraft.

As defined in 14 CFR 1.1, an aircraft, other than a helicopter or powered-lift that, since its original certification, has continued to meet the following:

(1) A maximum takeoff weight of not more than-

(i) 1,320 pounds (600 kilograms) for aircraft not intended for operation on water; or

(ii) 1,430 pounds (650 kilograms) for an aircraft intended for operation on water.

(2) A maximum airspeed in level flight with maximum continuous power ( $V_H$ ) of not more than 120 knots CAS under standard atmospheric conditions at sea level.

(3) A maximum never-exceed speed ( $V_{NE}$ ) of not more than 120 knots CAS for a glider.

(4) A maximum stalling speed or minimum steady flight speed without the use of liftenhancing devices  $(V_{S1})$  of not more than 45 knots CAS at the aircraft's maximum certificated takeoff weight and most critical center of gravity.

(5) A maximum seating capacity of no more than two persons, including the pilot.

(6) A single, reciprocating engine, if powered.

(7) A fixed or ground-adjustable propeller if a powered aircraft other than a powered glider.

(8) A fixed or autofeathering propeller system if a powered glider.

(9) A fixed-pitch, semi-rigid, teetering, two-blade rotor system, if a gyroplane.

(10) A nonpressurized cabin, if equipped with a cabin.

(11) Fixed landing gear, except for an aircraft intended for operation on water or a glider.

(12) Fixed or retractable landing gear, or a hull, for an aircraft intended for operation on water.

(13) Fixed or retractable landing gear for a glider.

v. Movement Area - the runways, taxiways, and other areas of an airport/heliport which are utilized for taxiing/hover taxiing, air taxiing, takeoff, and landing of aircraft exclusive of loading ramps and parking areas. At those airports/heliports with a tower, specific approval for entry on the movement area must be obtained from air traffic control.

w. Navigation Aid - any facility used in, available for use in, or designated for use in aid of air navigation, including landing areas, lights, any apparatus or equipment for disseminating weather information, for signaling, for radio direction finding, or for radio or other electronic communication, and any other structure or mechanism having a similar purpose for guiding or controlling flight in the air or the landing or takeoff of aircraft.

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

**y.** Occurrence (Flight Standards) - an event, other than an accident or incident that requires investigation by the Flight Standards Service for its potential impact on safety. Includes the following when no injury, damage, or 49 CFR 830.5 reporting requirements are involved:

(1) Aborted takeoffs not involving a runway excursion.

(2) Air turnbacks where the aircraft returns to the departure airport and lands without incident.

(3) Air diversions where the aircraft diverts to a different destination for reasons other than

weather conditions.

**z. Operation of Aircraft** - the use of aircraft for the purpose of air navigation and includes the navigation of aircraft. Any person who causes or authorizes the operation of aircraft, whether with or without the right of legal control (in the capacity of owner, lessee, or otherwise) of the aircraft, must be deemed to be engaged in the operation of aircraft within the meaning of Title 49 United States Code.

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

**bb. Pilot Deviation** - the actions of a pilot that result in the violation of a Federal Aviation Regulation or a North American Aerospace Defense (Command Air Defense Identification Zone) tolerance.

cc. Public Aircraft - an aircraft used only for the Federal, State and Local Government, or owned and operated (except for commercial purposes), or exclusively leased for at least 90-continuous days, by a government (except the United States Government), including a State, the District of Columbia, or a territory or possession of the United States, or political subdivision of that government; but does not include a government-owned aircraft transporting property for commercial purposes, or 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, 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. An aircraft described in the preceding sentence must, notwithstanding any limitation relating to use of the aircraft for commercial purposes, be considered to be a public aircraft for the purpose of this part without regard to whether the aircraft is operated by a unit of government on behalf of another unit of government, pursuant to a cost reimbursement agreement between such units of government, 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.

**dd. Runway Incursion** - Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take off of aircraft.

**ee.** 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.

**ff. 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 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 wing tips are not considered substantial damage for the purpose of this order.

**gg. Surface Incident** - any event during which unauthorized or unapproved movement occurs within the movement area or an occurrence in the movement area associated with the operation of an aircraft that affects or could affect the safety of flight.

**hh. Survivable Accident** - an accident in which the cockpit and/or structure remains relatively intact and the forces experienced by the occupants did not exceed or should not have exceeded the survivable limits of human G-tolerance. Such an accident is classified as survivable even if some or all occupants were fatally injured. (**NOTE**: the investigator makes his or her greatest contribution to air safety by documenting the reasons why aircraft occupants were fatally or seriously injured in survivable accidents.)

- ii. Ultralight Vehicle a vehicle that:
  - (1) Is used or intended to be used for manned operation in the air;
  - (2) Is used or intended to be used for recreation or sport purposes only;
  - (3) Does not have a U.S. or foreign airworthiness certificate;
  - (4) If unpowered, weighs less than 155-pounds; or
  - (5) If powered:

(a) Weighs less than 254-pounds empty weight, excluding floats and safety devices which are intended for deployment in a potentially catastrophic situation;

(b) Has a fuel capacity of not exceeding 5-U.S. gallons;

(c) Is not capable of more than 55-knots calibrated airspeed at full power in level flight;

and

(d) Has a power-off stall speed which does not exceed 24-knots calibrated airspeed.

**jj. Unmanned Aircraft Systems (UAS) aka (UAV)** - a device used or intended to be used for flight in the air that has no onboard pilot. This includes all classes of airplanes, helicopters, airships, and translational lift aircraft that have no onboard pilot. Unmanned aircraft are understood to include only those aircraft controllable in three dimensions and therefore, excluding traditional balloons and un-powered gliders.

**kk. U.S.-Accredited Representative** - an individual accredited to represent the United States in foreign accident or incident investigations.

**II.** Vehicle or Pedestrian Deviation - any entry or movement on the airport movement area by a vehicle operator or pedestrian that has not been authorized by air traffic control (includes surface incidents involving aircraft operated by nonpilots, such as mechanics).

**7. Forms and Reports.** FAA, NTSB, and other forms used for aircraft accident and incident notification, investigation, and reporting are listed in Appendix 1, Part 1, List of Current Forms and Appendix 2, Examples of Forms and Procedures Used by Flight Standards Service.

**8.** Authority to Change this Order. Only the Administrator or Deputy Administrator may approve substantive changes to this directive. The Director of Accident Investigation 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.

**9. FAA Responsibilities in Aircraft Accident Investigations.** The responsibilities of FAA related to aircraft accident investigations in accordance with Sections 40113 and 44702 of Title 49 United States Code are to:

**a.** Make sure that all of the facts, conditions, and circumstances leading to the accident are recorded and evaluated, and action is taken to prevent similar accidents.

**b.** Circulate and enforce Federal Aviation Regulations for certificating civil aircraft airworthiness, for certificating airmen and air carriers for competency, and for certifying airports used by air carriers utilizing aircraft with more than 30 passenger seats for compliance with certain safety standards. This responsibility includes the continued surveillance of the airworthiness of aircraft and competence of airmen, air agencies, commercial operators, air carriers, and the safety of airports. Aviation Security is now under the direction and control of the Transportation Safety Administration (TSA). Inspectors observing or being notified of a possible security incident should report the occurrence to the local TSA office.

FAA's nine responsibilities in accident investigations are to determine whether:

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

(2) Performance of non-FAA owned and operated air traffic control (ATC) facilities or a navigational aid was a factor.

(3) Airworthiness of FAA-certificated aircraft was a factor.

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

(5) Federal Aviation Regulations were adequate.

(6) Airport certification safety standards or operations were involved.

(7) Airport security standards or operations were involved.

(8) Airman medical qualifications were involved.

(9) There was a violation of Federal Aviation Regulations.

c. Support the NTSB by verbally informing the office with jurisdictional accident investigation responsibility of all facts, conditions, and circumstances surrounding an accident in which the NTSB does not participate on scene. The FAA IIC will provide the NTSB with photographs, witness statements, and other pertinent information necessary for determining probable cause. The exception is that a written statement about a particular segment of the investigation, i.e., an engine teardown, can be provided to the NTSB.

**d.** Participate in any civil aircraft accident investigation or any accident investigation conducted by the NTSB that involves both civil and military aircraft so that the Administrator may properly discharge his or her duties and responsibilities in accordance with Title 49 United States Code.

(1) In the case of accidents that involve 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.

(2) The Armed Forces have developed a joint regulation by mutual agreement to implement Title 49 United States Code (*see Air Force Regulation AFJI 91-206, Army Regulation 95-30, Operations Navy Instruction 3750.16c, Coast Guard Regulation 307, and Chapter 7).* 

e. Participate with the NTSB in foreign accident investigations upon request by the State of accident occurrence. International Civil Aviation Organization (ICAO) Annex 13, Aircraft Accident Investigation, provides that such investigations must be conducted by authorities of the State

in which an accident occurs. 49 CFR 831.2(a) excludes the investigation and reporting of aircraft accidents in foreign countries (*see Appendix3*).

**f.** Notify the NTSB, through the FAA IIC, when the NTSB does not participate in the on-scene investigation prior to authorizing NTSB funds.

**g.** Coordinate autopsies and tests of the remains of persons aboard the aircraft at the time of the accident under authority delegated by the Administrator to any medically qualified official or medically qualified FAA employee. Designated aviation medical examiners (AMEs) are not deemed to be FAA officials or employees for this purpose.

**10. Responsibilities of Regional Divisions and Aircraft Certification Directorates in Aircraft Accident Investigations.** Regional personnel in Air Traffic, Flight Standards, Airports, Aerospace Medicine, and Security and Hazardous Material Divisions, the Aircraft Certification Directorates, and Office of Communications staff may be required to participate in an accident investigation. During such participation, a representative is designated to coordinate the division, directorate, or staff responsibilities and provide assistance and required reports to the FAA IIC.

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

**a.** FAA and 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) 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 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 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.

**b.** Additional facts needed by FAA, but not required by NTSB, must be obtained by the FAA IIC in coordination with the NTSB IIC in a manner that does not interfere with the NTSB investigation. In obtaining such facts, FAA personnel must clarify that they are not acting under NTSB direction.

**c.** The NTSB must investigate all accidents and incidents involving FAA aircraft or airmen. An FAA aircraft is defined as any aircraft which is owned, leased, under military bailment, rented by the FAA, or piloted by FAA personnel when in an official FAA capacity. The FAA must participate in the NTSB investigation of FAA aircraft accidents and incidents in the same manner as in the NTSB investigation of civil aircraft accidents and incidents.

**d.** The FAA must investigate all accidents and incidents involving aircraft piloted by NTSB personnel.

e. FAA procedures for participation in NTSB incident investigations will be the same as for accident investigations.

**12. Post-Accident or Incident Drug Testing.** Post-accident drug testing must be conducted in accordance with current DOT and FAA directives.

**13.** FAA Investigator-In-Charge (IIC). The FAA IIC directs and controls all FAA participation in the investigation until the investigation is completed. FAA activity at hearings and depositions, however, is under the direction and control of the FAA spokesperson that normally represents the Office of Accident Investigation, with assistance from the Office of the Chief Counsel. The FAA IIC reports to AAI-1 through the Manager, Accident Investigation Division, AAI-100. (NTSB and the military service use the term "FAA coordinator" during NTSB or military service-conducted investigations.)

#### 14. FAA Participants.

**a.** Participants are responsible to the FAA IIC in all matters related to the function(s) assigned by and/or agreed to by the FAA IIC. FAA participants must not withdraw from the investigation (if assigned to a group) until that phase of the investigation has been completed or they are released by the NTSB IIC and the FAA IIC. Participants must submit reports if requested by the FAA IIC.

**b.** Participants will provide information or reports only to members of the investigative team and appropriate FAA personnel. The FAA IIC must be made aware of the nature and content of this information.

**c.** Personnel that represent an FAA element that has been authorized access to the accident scene but have not been assigned as participants are subject to the requirements of paragraphs 14a and b. These personnel must provide the FAA IIC with reproducible copies of all investigation reports which they prepare or receive.

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

**16. FAA Safety Recommendation Program.** The main purpose of accident and incident investigation is prevention. The FAA Safety Recommendation Program is one of the processes used to identify and correct safety deficiencies in the National Airspace System (NAS).

**a.** Responsibilities of FAA Personnel. FAA inspectors, by virtue of their qualifications and aviation experience, are expected to examine objectively the facts, conditions, and circumstances of an accident or incident and to identify and submit safety recommendations using procedures outlined below. Inspectors, FAA managers, and all other FAA personnel should be alert for issues that warrant corrective actions, whether they arise during an investigation or other duties. Action offices that receive safety recommendations must address them with the thoroughness necessary to respond to the deficiency or to propose alternate actions. In no case will a recommendation be ignored. Submitters of safety recommendations are encouraged to contact AAI-200 regarding any questions concerning the safety recommendation process.

**b.** Recommendation Procedures. Accident or incident prevention recommendations related to deficiencies of design, operation, or maintenance practices or of established standards, procedures, or policies must be submitted and reviewed as described below.

(1) The inspector, FAA manager, or any other FAA employee will prepare a memorandum which briefly describes the accident or incident and the deficient areas. Sufficient detail and/or substantiating information should be included so that the reader understands the development of the recommendations. This description will be followed by safety recommendations. A separate recommendation should be written for each issue. If possible, the recommendation should specify how this will resolve the identified safety problem. Recommendations received by an FAA employee from a non-FAA employee may be submitted. However, the FAA employee submitting the recommendation must agree with the intent of the recommendation and either rewrite the recommendation or attach a cover letter when submitting the recommendation.

(2) The memorandum can be reviewed by the author's supervisor or other subject matter experts, and additional pro/con statements may be added as attachments. Any person who "reviews" a safety recommendation on behalf of the submitter must ensure its timely transmittal to AAI-200. However, the original memorandum cannot be altered in any way without the specific consent of the author. The memorandum must clearly indicate the author of the recommendation, his/her business address, and telephone number. No recommendation will be prevented from going forward to the Office of Accident Investigation.

(3) The memorandum and any supporting documentation, photos, etc., must be sent to the Federal Aviation Administration, Office of Accident Investigation, Recommendation and Analysis Division, AAI-200, 800 Independence Avenue SW, Washington, DC 20591.

(4) If the inspector or other person submitting the recommendation believes that an emergency situation exists that jeopardizes life or property, then personal or telephone contact should be initiated immediately with AAI-200 and followed up by a written recommendation.

(5) AAI-200 will review each recommendation, acknowledge receipt of the recommendation (to the author/writer), enter it in the office's Program Tracking and Reporting System and forward the recommendation to the proper FAA program office which must respond to the recommendation

(6) The FAA program office has 90 calendar days to evaluate the recommendation and forward its response to AAI-200. Safety recommendations deemed as emergency or significant in nature may have suspense dates of less than 90 days. The exact due date will be stated in the transmittal letter to the program office assigned responsibility for action. The program office will take one of the following two actions:

(a) Accept the recommendation and either describe a plan with proposed corrective actions on how the recommendation will be implemented, e.g., when an Airworthiness Directive will be issued, or describe what has already been done to address the recommendation, or both.

(b) Reject the recommendation and explain why.

(7) A Safety Recommendation Review Board (SRRB) chaired by the safety recommendation program manager in AAI-200 and composed of at least one technically qualified individual will review the responses from the FAA action offices. Before a safety recommendation is classified as closed, there must be at least one review by the SRRB. If the SRRB believes a recommendation has merit and the program office was not responsive to the identified safety issue, additional measures will be taken by the Office of Accident Investigation to resolve the issue. At a minimum, the responsible FAA program office will be asked to reevaluate the safety recommendation and the reasons for the initial rejection of the recommendation.

(8) A memorandum accepting or rejecting the recommendation will be forwarded to the author of the recommendation following the final decision of the SRRB.

(9) An annual Safety Recommendation Awards program has been established by the Office of Accident Investigation to recognize an individual's outstanding contributions to the promotion of aviation safety.

**c.** Corrective Actions. The authority of the Administrator to conduct investigations to re-inspect aircraft and reexamine airmen is given in Sections 40113 and 44709 of Title 49 United States Code. When an investigation reveals actual or suspected deficiencies related to the competency of an FAA-certificated airman, air carrier, commercial operator, airport, or air agency, FAA will undertake corrective actions in accordance with the latest edition of Order 2150.3, Compliance and Enforcement Program. All correspondence on corrective actions that were taken due to accident investigation findings should contain the NTSB accident report number.

**17. Training.** The following courses offered at the National Aircraft Accident Investigation School, Transportation Safety Institute (TSI), Mike Monroney Aeronautical Center, Oklahoma City, Oklahoma, are mandatory and recommended training requirements for FAA personnel who are designated to participate in accident or incident investigations:

#### a. Aircraft Accident Investigation, Course 00035.\*

- b. Aircraft Accident Investigation, Recurrent Training, Course 00003.\*
- c. Rotorcraft Accident Investigation, Course 00007.\*
- d. Human Factors in Accident Investigation, Course 00008.
- e. Aircraft Cabin Safety Investigation, Course 00379.\* (POI & Cabin Safety Specialists)
- f. Turbine Engine Accident Investigation, Course 00027.\* (Airworthiness Inspectors)
- g. Experimental Aircraft Accident Investigation, Course 00498.\* (General Aviation Inspectors)
- h. Aviation Safety Officer, Course 00038.

\* Denotes Mandatory Course requirement

18. Regional Supplements. One copy of each regional supplement to this order must be sent to AAI-200.

**19. Distribution.** This order is intended for all Assistant Administrators, Associate Administrators, and heads of offices and services; division level in the offices of Labor and Employee Relations, Personnel, and Environment and Energy; branch level in the offices of Chief Counsel, International Aviation, Office of Communications, Airport Safety and Standards, *Security and Hazardous Materials*, Accident Investigation, Aerospace Medical; Aircraft Certification and Flight Standards Services; Air *Traffic Organization Vice Presidents, Directors, service areas, and field facilities,* National Airspace System (NAS) Transition and Implementation; NAS Operations; and Aviation System Standards; regional division level in Cornerstone Regional Operations Center, International Aviation Officer, and *Communications*; regional branch level in Human Resource Management, Certification Directorates, Flight Standards Service, Aerospace Medicine, *Airports, and Security and Hazardous Material; Aeronautical Center Division level in Operations Center*, Center Counsel, and Communications; and branch level in *Security and Hazardous Material*, Human Resource Management, and FAA Academy; Technical Center Division level in Operations Center, Center Counsel, and a standard distribution to all field offices and facilities.

### Chapter 2. FAA Elements Involved In Notification, Investigation, and Reporting

#### 1. Office of Accident Investigation.

**a.** Director of Accident Investigation, AAI-1. The mission of the Office of Accident Investigation is to investigate aviation accidents and incidents so as to detect unsafe conditions and trends in the National Airspace System and to coordinate the correction action Process. This mission is accomplished under the Director who:

(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, on those matters under the direct purview of the office.

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

(3) Provides effective evaluation of program performance and assesses the adequacy of follow-up to secure correction of deficiencies.

(4) Reviews and assesses safety programs, operational policies, and activities as they relate to accident and incident investigations and makes recommendations.

(5) Apprises the associate administrators, regions, centers, and other FAA organizations on safety issues and programs related to accident and incident investigation findings and analyses.

(6) Coordinates with the Office of the Chief Counsel (AGC) on participation in NTSB hearings.

#### b. Accident Investigation Division, AAI-100. The division:

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

(2) Serves as the primary FAA organization for interaction with the National Transportation Safety Board (NTSB).

(3) Provides the FAA IIC for NTSB go-team accident and incident investigations and provides specialized technical support to NTSB working groups, as necessary, by arranging for the assignment of headquarters or field specialists.

(4) Conducts independent FAA investigations, as required, in major air carrier accidents or incidents; accidents associated with FAA licensed commercial space activities; significant commuter, air taxi, or general aviation accidents or incidents that reflect a lack of safety consciousness; and accidents and incidents that are catastrophic or involve recurring safety problems.

(5) Conducts investigations of selected NMAC's, operational errors, pilot deviations, runway incursions, including vehicle and pedestrian deviations.

(6) Conducts, at the request of the Director, special aviation safety investigations.

(7) Serves, on behalf of the Director, as the primary FAA point of contact for NTSB interaction.

(8) Designates the FAA spokesperson for NTSB public hearings.

(9) Serves as the accident and incident investigation liaison with other FAA participants, U.S. departments and agencies, the U.S. military establishment, foreign governments, and the aviation industry.

(10) Reports to the Director and appropriate FAA officials the facts, conditions, and circumstances of accidents and incidents investigated, the apparent causes, and the relationships of those findings to FAA safety programs, regulations, and responsibilities.

(11) Identifies safety and corrective action issues that arise from accident and incident investigations that will reduce the likelihood of recurrence and will enhance air safety.

(12) Develops and monitors a system for disseminating within FAA factual information identified as a result of accident and incident investigations.

(13) Assesses techniques and methods of accident and incident investigation and prescribes accident and incident investigation policies, practices, and procedures.

(14) Maintains a duty roster of the 24-hour Office of Accident Investigation duty officer for purposes of coordination and notification.

(15) Operates the FAA Office of Accident Investigation Duty Room, including management of the Automated Information-Dissemination Program and the Accident and Incident Briefing Program.

### c. Recommendation and Analysis Division, AAI-200. The division:

(1) Manages, on behalf of the Director, a system for FAA responses to NTSB safety recommendations.

(2) Coordinates with DOT on NTSB safety recommendation status and the automation of the NTSB Safety Recommendation Program.

(3) Manages, on behalf of the Director, a system for tracking FAA responses to FAA safety recommendations.

(4) Manages the Accident Investigation Quality Assurance Program and provides reports, information, and recommendations resulting from the program.

(5) Develops and manages accident and incident reporting programs and provides accident and incident information to other FAA organizations.

(6) Integrates the Accident Mishap Information System, Service Difficulty Reports, and other operational databases into accident and incident analysis functions in support of specific investigations or trends analysis.

(7) Conducts analyses of air carrier and general aviation accident and incident data to identify trends and safety deficiencies.

(8) Serves as the program manager to provide support and curriculum guidance to TSI's Aircraft Accident Investigation courses at the National Aircraft Accident Investigation School, Transportation Safety Institute, Oklahoma City, Oklahoma.

(9) Provides analytical and research support for litigation for the Office of the Chief Counsel.

(10) Serves as the FAA liaison for NTSB requests other than on-scene requests.

**2. Operations Centers.** Operations centers alert appropriate offices and assist in the notification process for aircraft accidents and incidents and FAA licensed commercial space activities. When requested, a center establishes communication conferences to obtain, analyze, and relay information on accidents and incidents so that all involved FAA participants are kept informed and decision-making can be done in a timely manner.

### 3. Air Traffic Organization.

**a.** Safety Services, System Operations Services, Flight Services, En Route and Oceanic Services, and Terminal Services. The Air Traffic Organization participates in the investigation of aircraft accidents and incidents when FAA air traffic control or aeronautical communications facilities are involved. Director of Operations and Service Center Directors are responsible for making sure that incidents in their assigned area that involve only air traffic functions are investigated and reported in a manner that makes sure of the proper discharge of the FAA responsibilities. These same requirements pertain to private, non-Federal facilities. If a facility is operating within the NAS, it must comply with the same rules and regulations as the Federal facility. (*see the latest edition of FAA Order 8020.16 for additional information*)

**b.** Technical Operations Services. The Technical Operations Services responsibilities and actions following an aircraft accident or incident are to ensure the continued safe operation of the NAS, investigate potentially involved facilities in a timely manner, restore operations of facilities removed from service and provide appropriate accident-related facility documentation.

(1) Technical Operations Aviation System Standards.

(a) The Director of Technical Operations Aviation System Standards must ensure that the appropriate Technical Operations Systems Standards elements assign personnel to participate in the investigation of accident and incidents that involve FAA aircraft. The purpose for this participation is to identify noncompliance with or inadequacies in FAA standards, policies, and supervision related to the operation and maintenance of FAA aircraft. Additional investigative guidelines are in the latest edition of FAA Order 4040.9, FAA Aircraft Management Program. Technical Operations Aviation Systems Standards personnel must report the findings and recommendations to their assigning element. A copy of their report will also be given to the FAA IIC. A verbal report summary and any recommendations will be made to the FAA IIC as soon as possible.

(b) Technical Operations Aviation Systems Standards, Flight Inspection Operations Group must:

(1) At the request of the FAA IIC, will conduct flight inspection of facilities after an accident or incident

(2) Provide flight inspection results to the FAA IIC or Technical Operations aircraft accident representative (AFAAR).

(2) Technical Operations Services. Technical Operations Navigation Services participates in the investigation of aircraft accidents and incidents with respect to the functions of all air navigation facilities, i.e., all air traffic control facilities and systems as defined in Title 49 United States Code.

**c.** Acquisition and Business Services, Information Technology, Technical Services Program. The Acquisition and Business Services, Information Technology, Technical Services is responsible for collecting, automating, and analyzing operational error, near midair collision, pilot deviations, and vehicle and pedestrian deviation reports.

**d.** Safety Services, Runway Safety and Operational Services. Runway Safety and Operational Services is responsible for evaluating all surface incident reports and making a determination as to whether or not the incident meets runway incursion criteria. Additionally, Runway Safety and Operational Services tracks and maintains all runway incursion data in the Runway Safety and Operational Services database.

(See the latest edition of FAA Order 8020.16 for additional information)

**4. Flight Standards Service.** The Flight Standards Service participates in the investigation of aircraft accidents and incidents through the regional Flight Standards (FS) divisions and the Flight Standards District Offices (FSDO).

#### a. Regional Flight Standards Division.

(1) The manager of the regional FS division is responsible for making sure that aircraft accidents and incidents that occur in the division's geographical area are investigated and reported to ensure the proper discharge of FAA responsibilities. If an incident involves only air traffic functions, i.e., air traffic operational errors or deviations, the service center manager must assume responsibility for the required investigative and reporting responsibilities in accordance with the latest edition of Order 7210.56, Air Traffic Quality Assurance.

(2) When an aircraft accident or incident occurs in one region's geographical area, but the aircraft continues flight to/through the airspace of another FAA region prior to flight termination, the FS division in the region when the aircraft first lands following the occurrence is responsible for making sure the FAA responsibilities are accomplished, except for pilot deviations (*See FAA Order 8020.16 Chapter 8, Paragraph 114*).

(3) The FS division manager also must:

(a) Determine which accident or incident report files are required and where they should be located to fulfill the division's responsibility.

(b) Include estimates for investigation costs in the annual budgetary "call for estimates."

(c) Submit quarterly reports to Air Traffic Finance Services, Information Technology Office, Technical Services Program, on the NMAC and pilot deviation reports received in the preceding quarters, the status of those reports, and the status of reports open at the beginning of the preceding quarter.

#### b. Flight Standards District Office (FSDO).

(1) The FSDO responsible for the geographical location of an accident or incident is responsible for investigating and reporting such accidents or incidents as assigned by the manager of the regional FS division (*See Paragraph 4a. (2) on multiple region investigation responsibility*).

(2) The type of response for accident and incident investigations will vary by type of occurrence and other factors, from delaying departure to the following day to initiating a major investigation immediately.

(3) After determining that a reported event is an Occurrence (Flight Standards) as defined in paragraph 5 involving a 14 CFR 121 air carrier with no on-scene investigation conducted, the FSDO will notify the certificate-holding district office (CHDO) of the occurrence and the CHDO will investigate and report on the occurrence as prescribed in Flight Standards Service directives. If the FSDO conducts an on-scene investigation due to the specific circumstances of the event, the FSDO shall retain occurrence investigation and reporting responsibility.

**c.** Aviation Data Systems Branch. The Aviation Data Systems Branch, AFS-620, serves as the FAA focal point for the receipt and data recording of general aviation and air carrier

accident and incident reports, except for operational errors, near midair collisions, pilot deviations, and vehicle and pedestrian deviations, all of which are maintained by the Acquisition and Business Services, Information Technology, Technical Services Program. *(See FAA Order 8020.16 for additional information)* AFS-620 also serves as the office of primary interest for the accident/incident data system (AIDs) database. Reports/incidents which meet runway incursion criteria are analyzed and tracked by the Runway Safety and Operational Services, and maintained in its database.

**5. Office of Aerospace Medicine.** The Office of Aerospace Medicine provides the expertise to support FAA in the investigation of medical aspects of aerospace accidents and incidents. The purpose of this participation is to provide support in the area of accident causation related to pilot incapacitation and also in the area of human factors, crashworthiness and "crash injury and mechanism of injury" analysis. The Office of Aerospace Medicine will continue to provide pathological and toxicologic services to NTSB, for aerospace accidents, without reimbursement in accordance with the existing Reimbursable Memorandum of Agreement between the DOT and NTSB dated May 1975 and amended Appendix A of the Reimbursable Memorandum of Agreement dated December 1986 between the FAA and NTSB.

6. Office of Airport Safety and Standards. The Office of Airport Safety and Standards participates in aircraft accident and incident investigations when airport functions are involved. The regional airports division is responsible for the investigation and completion of reports (FAA Form 8020-25, Investigation of Vehicle or Pedestrian Deviation Report) on those vehicle and pedestrian deviations (VPDs) at airports certificated under 14 CFR part 139 not caused by a mechanical taxing an aircraft on an airport movement area. The Regional Airports Division Manager must submit quarterly reports to the Air Traffic Finance Services, Information Technology Office, Technical Services Program on the vehicle and pedestrian deviation reports received in the preceding quarter, the status of those reports, and the status of reports open at the beginning of the preceding quarter.

**7. Office of the Chief Counsel.** The Office of the Chief Counsel is responsible for all legal services required for FAA functions involved in the investigation of aircraft accidents and incidents and FAA licensed commercial space activities. The legal representative is responsible for all legal services required for FAA functions involved in the investigation of the types of aircraft accidents and incidents in Chapter 3, Section 6, paragraph 3.

**8.** Assistant Administrator for Security and Hazardous Materials. The Assistant Administrator for Security and Hazardous Materials provides specialized technical and investigative assistance for enforcement or referral action for aircraft accidents and incidents and FAA licensed commercial space activities that directly involve hazardous material, atmospheric/ radiological material, etiological contamination, or criminal activity. Office personnel may also provide assistance in such matters as certification of security clearances, preparation of identification media, handling of classified information, and other matters.

**9.** Aircraft Certification Service. Aircraft Certification Service is responsible for the safety of civil aircraft. This organization consists of the headquarters policy office and four special policy offices called "directorates." Each directorate is responsible for policy under Federal Aviation

Regulations covering a particular category of aircraft or aeronautical part (*see Appendix 1*). The four directorates serve as "geographical directorates" and are responsible for all of the field offices within a geographical area. The field offices are responsible for:

**a.** Issuing product-type certificates and other design approvals held by manufacturers in the responsible geographic area.

**b.** Providing engineering specialists to assist in the investigation of aircraft accidents and incidents that raise questions of product design.

c. Developing design-related corrective actions.

**10. Office of Communications.** The Office of Communications or the appropriate regional/center Communications staff respond to news media inquiries on FAA functions and responsibilities associated with an aircraft accident or incident or FAA licensed commercial space activity until the NTSB investigation team arrives at the scene. The NTSB becomes responsible for answering all media questions related to the accident itself, circumstances surrounding the accident, and its probable cause. For FAA investigations, media response is the responsibility of the headquarters Communications staff (*see Chapter 9*).

**11. Office of International Aviation**. The Office of International Aviation maintains a current list of countries to which the Department of State will not normally authorize travel by accident investigators unless explicit approval is first obtained from the Office of Aviation, Department of State. Also, when AAI-100 indicates interest in a foreign accident investigation in which the FAA is not entitled to participate under the Chicago Convention, the geographically responsible FAA international representative will, with the local U.S. Embassy, attempt to secure an invitation for FAA participation from the civil aviation authority of the crash-scene country.

**12. Office of Commercial Space Transportation.** The Office of the Associate Administrator for Commercial Space Transportation, as it pertains and relates to mishaps concerning FAA licensed commercial space activities, is responsible for:

**a.** Developing FAA policy and negotiating and implementing memorandum of agreement(s) (MOA) between the FAA and other Federal, state, and local government agencies concerning the notification, response, and investigation of accidents, incidents, and other identified mishaps.

**b.** Providing oversight, guidance, and direction to the Licensing and Safety Division (AST-200) concerning the development and promulgation of technical specifications and requirements relative to the implementation of that policy and approved MOA.

**c.** Identifying and developing FAA/AST mishap notification response and investigation plans and associated documentation relating to FAA licensed commercial space launch activities.

**d.** Identifying and providing engineering and technical support to the FAA IIC for NTSB and FAA accident and incident investigations conducted under the authority of the Office of Accident Investigation (AAI).

e. Conducting independent FAA/AST investigations.

# Chapter 3 Aircraft Accident Investigation Responsibilities Section 1. Air Traffic

1. General. When Air Traffic procedures are involved or are suspected of being involved in an aircraft accident or incident, air traffic aspects are included in the accident investigation. Air Traffic personnel shall cooperate to the fullest extent possible with personnel who are charged with conducting the investigation. Air Traffic's participation in the on-scene accident investigation is considered complete when the FAA IIC advises the FAA Air Traffic representative of its completion and leaves the Air Traffic facility. If the on-scene investigation of the Air Traffic facility is to be reconvened, the FAA IIC will coordinate such reconvening with Safety Investigations and Evaluations or the Regional Center as appropriate.

### 2. Air Traffic Accident Representative.

**a.** The Air Traffic manager or acting manager of the facility responsible for the development of the accident package is designated as the on-scene Air Traffic representative until the arrival of either the regional service center or headquarters-designated Air Traffic representative.

**b.** The FAA IIC shall be in charge of all FAA accident investigation assets and personnel and shall make all management decisions regarding FAA participation in the investigation. The FAA IIC shall be the Administrator's on-scene representative.

**3.** Air Traffic Accident Representative Responsibilities. The FAA Air Traffic accident representative shall:

**a.** Ensure that the operational integrity of the Air Traffic facility is not compromised.

**b.** With the Technical Operations Services representative determine if navigational facilities and/or ATC equipment are involved or suspected of being involved and:

(1) Ensure that Technical Operations personnel are notified.

(2) Determine that all required notification has been accomplished, including the appropriate NOTAM's.

**c.** Establish liaison promptly with the FAA IIC as the FAA Air Traffic accident representative, provide an initial briefing of pertinent facts, and act as the FAA IIC's principal contact for information and documents. Determine, within 1 hour of notification, with the Air Traffic and Technical Operations Services accident representatives, and the FAA IIC (if available) or appropriate Flight Standards personnel, if a flight inspection is required.

d. Establish and maintain contact with the Chief Counsel's office as appropriate.

e. Arrange, through direct contact with Air Traffic personnel involved in the accident, for the protection of their well-being as required and provide them with a briefing on investigation

procedures and their right to counsel during any interview. Provide personnel with information on their rights as they pertain to NTSB requests for drug or toxicology tests.

**f.** Make sure that all original documentation is protected, including the original voice recordings and/or computer data. The low-level windshear alert system data shall be transferred to tapes/digital re-recordings and/or other approved storage devices and preserved with the original accident documents. The release of any original document, voice recordings, personnel statement, or computer data without the express approval of Systems Operations Litigation is prohibited.

**g.** Conduct an investigation of all Air Traffic services provided relevant to the accident or incident to confirm the adequacy of equipment, procedures, and personnel. Promptly advise Safety Investigations and Evaluations and the appropriate service center of any deficiencies noted and the recommended corrective actions.

**h.** Provide the FAA IIC with working copies of draft transcripts and voice recordings as soon as practicable.

i. Direct all public inquiries concerning the accident to the FAA IIC.

**j.** Aid or arrange for additional personnel to aid the AT facility in preparing the accident documentation and material requested by the FAA IIC.

**k.** When advised by the FAA IIC that NTSB requires a briefing of air traffic aspects surrounding the accident, arrange for a facility representative to provide the requested briefing as soon as possible. Any direct requests from NTSB to the facility will be coordinated with the FAA IIC before providing the briefing.

**I.** When only air traffic services are involved in a military accident and AAI-100 or the FSDO does not designate an IIC, coordinate FAA investigation activities with the military investigator through the military Air Traffic Representative (ATREP) or, in the absence of an ATREP, directly with the military investigator.

# Chapter 3 Aircraft Accident Investigation Responsibilities Section 2. Office of Accident Investigation and Flight Standards

**4. Office of Accident Investigation Responsibilities.** The Director of Accident Investigation, AAI-1, develops FAA policy and procedural instructions regarding accident or incident investigation and reporting. When the circumstances of an accident or incident require headquarters participation, AAI-1, through the Manager, Accident Investigation Division, AAI-100, will coordinate the selection of a special investigation team with the appropriate regions and Washington offices. This team may be assigned to take part in or to conduct the accident investigation (*See Paragraph 10*).

**5. Regional Flight Standards Division Responsibilities**. The manager of the regional Flight Standards division is responsible for making sure that aircraft accidents and incidents in the FSDO's geographic area of responsibility are investigated and reported in a way that guarantees the proper execution of FAA responsibilities. Appendix 2 contains a flowchart showing the Flight Standards flow of information for accidents and incidents. Additional responsibilities are:

**a.** Providing technical help at the request of the FAA IIC. Trained FAA personnel must be made available for accident investigations, but the choice is not to be limited by regional boundaries. The region furnishing the requested personnel will be responsible for travel and per diem costs.

**b.** Establishing procedures for notification of and coordination with, as appropriate: FAA headquarters; NTSB field offices; other FAA offices, divisions, regional counterparts, and Aircraft Certification Directorates; and military services. It may be necessary to notify the aircraft, engine, or propeller manufacturer when the use of that expertise is appropriate in light of the circumstances or FAA manpower availability.

6. Designation of the FAA IIC. An FAA IIC must be assigned to all aviation accident and incident investigations. The FAA IIC will direct and control all FAA participation in the investigation. The selection of the FAA IIC may be made by the responsible district office manager or by the regional Flight Standards division manager. In certain instances, however, the FAA IIC may be assigned by AAI-100 in coordination with the regional Flight Standards manager. The Safety Service, Safety Investigations or service center will assign a representative for a military accident when air traffic is the only FAA element involved. The Flight Standards inspector who first receives notification of an aviation accident or incident will be the FAA IIC until relieved of this responsibility by the FSDO manager or the Flight Standards division manager.

7. Principal Air Carrier Inspector Responsibilities. Principal inspectors (i.e., operations, maintenance, and avionics) in the Flight Standards Service assigned to the operator involved must make themselves or their appointed representatives available to the FAA IIC as soon as possible. The extent of principal inspector participation will be determined by the FAA IIC after discussion with the principal inspector, the district office manager, and/or the appropriate Flight Standards division manager. AAI-100 must be kept informed of the status of the principal

inspector. The use of the principal inspector as an FAA IIC for investigations involving the principal's assigned carriers should be avoided.

**8. Possible Involvement of Navigation Facilities.** When a navigational facility was or may have been involved in an accident or incident, the FAA IIC will do the following:

**a.** After consulting with the Technical Operations Aircraft Accident representative (*AFAAR*), make the final determination as to the need for a flight inspection of a navigation facility involved or suspected of being involved in an accident or incident. The decision to request a flight inspection is to be based solely on safety concerns and not on economic factors.

**b.** Notify Technical Operations Aviation System Standards if a flight inspection is required.

# 9. Technical Operations Aviation System Standards Responsibilities.

**a.** The Flight Inspection Central Operations Office (FICO) is the focal point for post accident or incident flight inspection notifications. Upon receiving notification of an accident or incident that may have involved navigation problems or of an accident related to a navigation or communication facility, the FICO duty officer must coordinate with the appropriate Technical Operations Aviations System Standards, Flight Inspection Field Office (FIFO), or Technical Operations Aviations System Standards Technical Support Team. The FIFO must:

(1) Conduct a flight inspection as requested by the FAA IIC or AFAAR.

(2) Make sure that the FAA IIC and AFAAR are informed of the facility's operational status after completion of the flight inspection.

**b.** The Technical Operations Aviations Systems Standards, Technical Support Team must:

(1) Make sure that the inspection and report meet the proper standards and inform the FAA IIC.

(2) Make sure that two copies of the post-accident or incident flight inspection report and the last complete periodic flight inspection report are given to the FAA IIC.

### 10. Washington Headquarters "Go Team."

**a.** The Office of Accident Investigation, through AAI-100, will assume FAA responsibility for investigating selected accident and incidents and will appoint the FAA IIC and a team of technical specialists ("Go Team") as necessary. AAI-100 will give the proper regional Flight Standards division manager the name of the appointed FAA IIC, who will usually be selected from AAI-100, and the Go Team members' names when applicable. The headquarters FAA IIC will take responsibility for investigating and reporting the accident or incident upon arrival at the scene. The interim FAA IIC will remain on-scene to offer support and assistance until relieved by the headquarters-assigned FAA IIC.

**b.** The Vice President of Technical Operations Services, the Assistant Administrator for Security and Hazardous Material; the offices of the Chief Counsel, Aerospace Medicine, and Airport Safety and Standards; Flight Standards Service; the Office of Safety Investigations and Evaluations, and the appropriate Aircraft Certification Directorate will each appoint representatives and alternates to serve as Go Team members as required by the FAA IIC for the on-scene investigation.

**c.** The Go Team FAA IIC will keep AAI-1, through AAI-100, and the appropriate regional directors fully informed of the progress of the investigation through daily telephone conference calls. To ensure proper sharing of information, conference calls will be made through the region and Washington operations officer. Contact with the regions of occurrence and the Aircraft Certification Directorate with airframe, propeller, engine, or rotorcraft certification responsibility.

**11. FAA Safety Team Program Manager.** The aviation Safety Team Program Manager will not be assigned as FAA IIC or have responsibilities for accident investigation, standby duty, or other participant functions. The aviation safety team program manager's participation should be limited to the investigation of accident prevention causal factors and risk analysis. If assigned to accident investigation duties, however, the *aviation safety team program manager* will function the same as any participant.

# Chapter 3 Aircraft Accident Investigation Responsibilities Section 3. Office of Aerospace Medicine

**12. Purpose**. The Office of Aerospace Medicine conducts medical investigations of fatal and nonfatal aircraft accidents to determine the relationship of medical, toxicological, and human factors to accident cause, aircraft design, crash injury or occupant survival. The goal is to mitigate human factors-related accidents, and improve survival and minimize crash related injuries. Investigative findings will be applied toward improving aviation safety through regulatory and educational activities.

**13. Scope.** Medical investigations of aircraft accidents must be related to clearly defined goals and objectives. Autopsy and toxicological information will be obtained in fatal accidents and compiled with information in airmen's medical records to identify possible contributions of medical conditions and toxic agents to accidents. In addition, investigation projects will be undertaken for nonfatal and fatal accidents to test specific hypotheses relating human factors to accident cause and aircraft design to crash injury and survival.

**14.** Notification. After a report of a fatal aircraft accident, the Cornerstone Regional Operations Center (C-ROC) will immediately notify the appropriate Regional Medical Office (RMO). RMO staff will initially assist the NTSB Investigator-in-Charge (IIC) or FAA IIC as needed. The RMO staff will in turn, preferably the same business day, notify the Medical Research Team (AAM-630) at the Civil Aerospace Medical Institute (CAMI) of the accident. AAM-630 will coordinate with the NTSB IIC or FAA IIC and local authorities in arranging for autopsies and obtaining toxicologic specimens.

Because CAMI has dual responsibilities in accident investigation through two organizations, AAM-630 will ensure that the Forensic Toxicology Research Team (AAM-610) is also made aware that an aircraft accident has occurred and to expect toxicology samples.

15. Responsibilities. The Office of Aerospace Medicine (AAM) will:

**a.** Develop all policies and coordinate all functions relevant to the medical investigation aircraft accidents and incidents.

**b.** Identify requirements in the medical investigation of aircraft accidents; plan, review, and recommend projects that will fulfill requirements; and review the status of assigned investigation projects.

c. Manage assigned accident investigation projects.

**d.** Participate in air carrier aircraft accident and incident investigations as requested.

e. Conduct special investigations of aircraft accidents as requested.

**f.** Obtain information in conjunction with accident investigations in coordination, as appropriate, with regional flight surgeons and the Director, CAMI, AAM-3.
# 16. Regional Flight Surgeon Responsibilities. The regional flight surgeons will:

**a.** Upon initial notification of any fatal aircraft accident or in-flight medical incapacitation involving flight crewmembers, Regional Medical Office (RMO) staff will notify AAM-630 and AAM-1/2. As part of the notification process, RMO staff will review the medical certification of any airman involved.

b. Participate in aircraft accident and incident investigations as requested.

**c.** Manage and conduct the duties and responsibilities of the Regional Medical Office established in the Accident Investigation Bloodborne Pathogens Program as defined in Chapter 10 of this document.

**d.** Provide advice and assistance regarding occupational hazards assessment that may have occurred at the accident/incident scene.

**e.** Provide advice on Office of Workers' Compensation (OWCP) issues that may arise from employees' participation in aerospace accident or incident investigations.

# 17. Civil Aerospace Medical Institute (CAMI) Responsibilities. CAMI will:

a. Manage accident and incident investigation projects assigned to it.

b. Participate in aerospace accident and incident investigations as requested.

(1) Consultative participation encompasses various operational and research disciplines including but not limited to: Aerospace Medicine, forensic toxicology, biochemistry, bioengineering, aerospace engineering, psychology, human factors analysis, imaging, computer and library sciences.

(2) Medical incident/accident participation can span immediate or subsequent field work; follow up activities in various locations, and/ or provisions of office response to medical inquiries.

**c.** Conduct special investigations of aerospace accidents and incidents at the request of AAI, the Federal Air Surgeon, or the Director of CAMI.

**d.** Conduct toxicologic analyses on specimens from, and special pathologic studies on, aerospace incident/accident victims. Conduct research into methodology of post incident/accident specimen analysis.

**e.** Coordinate with the NTSB IIC or the FAA IIC as requested in arranging for autopsies of aircraft accident victims, obtaining specimens, and acquiring information. The CAMI Autopsy Team will budget for and arrange for payment of autopsies; notify FSDOs of the Team's intent or willingness to pay for requested autopsies; and, collect and store autopsy reports. The team coordinator will notify FSDOs of the Team's intent or willingness to provide copies of autopsies to agencies and officials involved in an accident or incident investigation.

**f.** The CAMI Autopsy Team will coordinate, as required, with the NTSB IIC and the FAA IIC to ensure that whenever toxicological specimens must be sent to local laboratories, duplicate specimens are obtained for analysis by the Bioaeronautical Sciences Research Laboratory, AAM-610, of the Aerospace Medical Research Division, AAM-600, at CAMI.

**g.** Compile, store, and analyze incident/accident reports, autopsy and toxicological reports, and medical certification information, aircraft occupant injury, in-flight aircrew incapacitation, and other human performance information on airmen involved in aerospace incidents and accidents for identification of possible trends requiring additional research.

**h.** Establish aeromedical research databases that comply with current privacy act and HIPAA requirements, to allow determination of possible contributions of various medical and human factors in incidents and accidents.

**i.** Coordinate with the Transportation Safety Institute (TSI) to provide aerospace medical expertise for training of accident investigators and "Go Team" members, as appropriate, in human factors, medical factors and crashworthiness investigation of aerospace accidents.

**j.** Contribute to FAA publications, peer reviewed scientific and lay journals. Release of information, including feedback on incidents/ accidents with medical or human factors interest, will be in accordance with all applicable DOT, FAA, AVS, AAI, AAM, NTSB and federal privacy act policies.

**k.** Provide occupational and environmental health support to the medical incident/accident investigation and research program.

# Chapter 3 Aircraft Accident Investigation Responsibilities Section 4. Office of Airport Safety and Standards

# 18. Responsibilities.

**a.** The Airport Safety and Operations Division, AAS-300, is designated as the primary contact and focal point in the Office of Airport Safety and Standards with regard to the coordination of accident and incident information with the Accident Investigation Division, AAI-100.

**b.** AAI-100 will immediately contact the designated AAS-300 representative when air carrier and commuter accidents occur on or near an airport and provide the representative with the information. A determination will then be made whether AAS-300 or regional certification inspectors or both will participate in the investigation. AAS-300 will send personnel based on the following criteria:

(1) Catastrophic accidents or significant fires require AAS-300 and regional personnel.

(2) Other accidents or incidents require regional personnel only.

**c.** When AAS-300 certification personnel participate, arrangements will be made with AAI-100 for transportation on FAA aircraft, if available. Otherwise, commercial air transportation will be used.

**d.** AAI-100 will be provided with a current list of AAS-300 individuals from which one will be notified. This list will also be on file in the Washington Operations Center. If AAS-300 is to participate in the investigation, AAS-300 will arrange for a credentialed headquarters certification inspector to participate. AAS-300 will contact the appropriate C-ROC to notify regional certification personnel who will participate. Regional call-up information will be assembled and issued to all concerned.

**e.** AAI-100 may request AAS-300 to provide an airport specialist in areas other than airport certification. Upon receipt of such a request, AAS-300 will contact the appropriate airport organization in order to provide the needed specialty.

**f.** Special emphasis will be given to those items required and contained in the Airport Certification Manual/Specification at airports certificated under 14 CFR 139. Investigations should include an analysis of the self-inspection reports prepared by airport personnel to determine if a deficiency that may possibly relate to the accident was reported, and what actions were taken to correct the deficiency.

**g.** If, during the investigation, possible violations of 14 CFR 139 become evident, Regional Airports Division Certification staffs shall be notified immediately so that corrective and enforcement actions may be initiated.

**h.** Special emphasis will be given at airports subject to Federal agreements (airport grant-in-aid and surplus property) to any contributing factors associated with or pertinent to such agreements.

**i.** Upon receipt of accident or incident information from AAI-100 or any other source that may involve airport functions, a preliminary report will be made by AAS-300 to the Director of Airport Safety and Standards, AAS-1, and other interested divisions and branches.

**j.** AAS-300 will advise AAS-1 and other appropriate divisions and branches of any involvement of the Office of Airport Safety and Standards functions that may be revealed during the accident or incident investigation.

**k.** All airport representatives will report to the FAA IIC and may be assigned to a working group when their expertise is required.

## 19. Regional Airports Division Responsibilities.

**a.** Regional Airports division managers shall make arrangements to receive immediate notification of accidents and incidents from the ROC and other sources as appropriate.

**b.** Upon receipt of notification that an accident or incident has occurred that may involve the Office of Airport Safety and Standards functions, including 14 CFR 139, the region with jurisdiction will designate an airport certification inspector or other specialist to assist in the investigation. When the FAA IIC assigns the Airports representative to a group, the representative will remain with that group until released by the group chairperson.

**c.** When a regional Airports division has been requested to provide a specialist other than an airport certification inspector, the specialist will be instructed in the proper investigation procedures.

**d.** The regional Airports division will be responsible for conducting investigations of vehicle and pedestrian deviations at airports certificated under 14 CFR part 139 with airport traffic control towers not caused by a mechanical taxing an aircraft on an airport movement area. The investigation by the regional certification inspector will include the completion of FAA Form 8020-25 (Investigation of Vehicle or Pedestrian Deviation Report) within 90 days of the receipt of FAA Form 8020-24 (Preliminary Vehicle or Pedestrian Deviation Report) from air traffic control. FAA Form 8020-25 will be completed even if the vehicle or pedestrian deviation led to an accident.

**e.** When requested by the FAA IIC, Airports 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 Airports' responsibility pertinent to, or which could have a relationship to, the accident or incident.

# Chapter 3 Aircraft Accident Investigation Responsibilities Section 5. Office of the Chief Counsel

**20. General.** The provision of legal representation, counsel, and advice to the Office of the Administrator and other FAA offices and services in connection with accident investigations, is a primary function of the Office of the Chief Counsel (AGC) and should be given a high priority at all times.

**21. Extent of Legal Participation.** 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.

**22. Investigations Requiring Full Legal Participation.** A legal representative of AGC shall be designated for each aircraft accident investigation that requires legal participation. The legal representative will be designated only in the investigation of those accidents where the degree of FAA interest is substantial. Such accidents usually involve one or more of the following:

**a** Substantial damage to an air carrier aircraft resulting in one or more fatalities.

**b**. A midair collision involving at least one civil aircraft.

c. A near midair collision in controlled airspace resulting in serious injury or fatality.

**d**. Substantial damage to a civil aircraft or serious injury or fatality of nonmilitary personnel under circumstances which will create strong public interest.

**e**. Accidents or incidents, civil or military, in which it is suspected that FAA facilities contributed to the occurrence.

**23. Designation of Legal Representative.** AGC-400 designates the FAA legal representative in the investigation of all accidents described in paragraph 22 above. In case the event is a covered claim under the Department of Transportation (DOT) Insurance Program, AGC-1 should consider any conflict issues.

24. Legal Representative Responsibilities. 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 and development 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**. Provide legal clearance of all statements, documents, and related evidence presented by the FAA during the investigation.

**e**. Determine from AAI-100 or the FAA IIC what evidence NTSB or a military agency seeks from FAA and the names of FAA employees that have been requested to testify in a formal or informal hearing.

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

**g.** Provide legal representation for FAA personnel in all NTSB and military agency interviews and hearings when the personnel request such representation.

**h.** Provide any FAA legal material that might be required during an investigation, such as opinions on the effect of statutory provisions or related memoranda.

**i.** Counsel and guide the FAA spokesperson at NTSB hearings or at hearings conducted by military authorities under Title 49 U.S.C. and Chapter 6 of this order. When determined as appropriate by the FAA IIC or ATREP, act as FAA spokesperson in a military hearing.

**j.** Perform all other legal functions which may be required during an investigation. Assist in the presentation of FAA evidence and the carrying out of FAA responsibilities.

**k.** Report significant developments and problems to AGC as expeditiously as possible.

# Chapter 4. Accident Investigation, Reporting, and Quality Assurance Program Section 1. Investigation Guidelines and Quality Assurance Program

**1.** General. The following guidelines are provided for the purpose of ensuring a thorough investigation of aviation accidents. Information in this section relates to FAA investigative activities during accident investigations.

**a.** The United States, as a member of ICAO, assisted in the preparation of the latest edition of ICAO Document 6920, Manual of Aircraft Accident Investigation, which contains advice and direction on the investigation of aircraft accidents.

**b.** If an FAA IIC or participant is undecided about the proper procedure to use during an investigation, he or she should do the following:

(1) FAA IIC: contact supervisor or AAI-100.

(2) Participants: contact the FAA IIC.

**2.** National Transportation Safety Board (NTSB). The NTSB investigates civil aircraft accidents and incidents and coordinates with the FAA IIC in its conduct of the investigation. NTSB may investigate aircraft or air traffic incidents; in both cases, NTSB has the same authority as in accident investigations.

# 3. Extent of Investigation.

**a.** FAA will investigate aircraft accidents to the extent necessary to:

(1) Establish the facts, conditions, and circumstances of the occurrence.

(2) Determine the proper execution of FAA responsibilities.

(3) Identify safety issues surrounding the accident and submit meaningful safety recommendations.

(4) Submit a verbal report to the NTSB from which the NTSB may make a determination of probable cause for accidents that the NTSB did not participate on-scene. Provide the NTSB with photographs, witness reports, etc., to become a part of and support the NTSB accident report. Written reports may be submitted to the NTSB for a specific fact, i.e., a report relative to an engine teardown.

(5) In the event that the NTSB is not on site and has delegated the investigation to the FAA, the FAA will conduct the investigation. Information gathered during the investigation will be made available to the NTSB, but may also be used for FAA purposes. All interviewees should be advised that the FAA is conducting the investigation.

**b.** The FAA IIC is expected to participate in all on-scene investigations to ensure that all FAA areas of responsibility are considered prior to initiating the FAA Form 8020-23.

c. On-scene investigation includes tasks that can occur at a location other then the actual accident site. These on-scene activities may include engine teardowns, a review of aircraft documentation or an inspection and evaluation of aircraft wreckage that has been relocated for storage or other related tasks. The determination of where and how to evaluate the FAA's areas or responsibility belongs to the FAA IIC and his/her manager. Coordinate with the NTSB to preclude the wreckage being released by National Transportation Safety Board prior to FAA inspection and evaluation. Actual accident site investigations are required for all accidents involving fatalities, certified Part 121 and Part 135 carriers, flight schools, public figures, news worthy-high visibility accidents, structural failure of aircraft and accidents that require on-site evaluation to properly evaluate the areas of responsibility.

d. The following situations require extensive investigation:

(1) Fatal or serious injuries are involved.

(2) Notification information indicates possible structural failure, design or manufacturing defects, an airworthiness or commercial space safety or flight termination system deficiency, or violation of the Code of Federal Regulations (CFR).

(3) Aircraft in-flight fire is involved.

(4) FAA facilities, procedures, personnel, or aircraft are involved.

(5) An identified safety deficiency is identified.

(6) AAI-100 requests extensive investigation.

## 4. FAA IIC Responsibilities.

**a.** The FAA IIC is an FAA employee designated either by the FSDO with jurisdiction in the area that the accident occurred or by AAI-100. The FAA IIC is responsible for the overall FAA investigation and is the principal contact for all aspects of the investigation. The FAA IIC must ensure that the initial notification message (8020-9) will be or has been transmitted by air traffic as soon as possible. For FAA licensed commercial launch accidents, the FAA IIC will be designated by AAI-100 or AST-200 (in consultation with AST-1).

**b.** The FAA IIC will conduct an investigation of all accidents regardless of whether the NTSB accomplishes an on-scene investigation. In the absence of the NTSB, the FAA IIC has the same authority and responsibility as the NTSB IIC, but the FAA IIC is not working for the NTSB. The FAA IIC will, in accordance with NTSB policy, provide party status to companies and associations that have a right to participate in the investigation.

**c.** The FAA IIC must have at least one of the following credentials which should be used to gain access to the accident site:

(1) FAA Form 110A, Aviation Safety Inspector's Credential, used by qualified Flight Standards personnel with the numbered Aviation Safety Inspector Badge.

(2) FAA Form 8020-20, Air Safety Investigator, used by Office of Accident Investigation personnel.

**d.** During accident and incident investigations, the FAA IIC must, as appropriate:

(1) Determine if a biohazard exists; if so, be sure that all FAA participants have access to and use of the equipment.

(2) Determine the biohazard area and ensure that the proper precautions are exercised.

(3) Advise other groups when their areas of responsibility are involved, e.g., the Flight Standards division with the air carrier certificate responsibility, respective Air Traffic organizations, Airports division, or Aircraft Certification Directorate.

(4) Maintain liaison with NTSB and the military services.

(5) Request technical assistance directly from regional Flight Standards divisions and headquarters through AAI-100.

(6) Request a flight inspection. Consult with the AFAAR, respective regional Air Traffic organization, or AAI-100 to determine the need for and the extent of a facility flight inspection.

(7) Confer with regional, center, and headquarters legal counsel.

(8) Use the NTSB's accident headquarters (command post) as the FAA IIC headquarters during the investigation.

(9) Provide the NTSB IIC with information requested by NTSB and other relevant information obtained by the FAA.

(10) Supervise all FAA investigation personnel and coordinate their group assignments with the NTSB IIC. FAA personnel will not be released until the FAA IIC has copies of and has discussed all exhibits that FAA participants obtained during the investigation and until the NTSB IIC has released the participants.

(11) Aviation safety inspectors/investigators should remain cognizant of the manufacturer's need to have access to the accident site and work with them to facilitate access.

(12) Keep the regional office advised of where the FAA IIC can be contacted during the investigation's field phase.

(13) Keep AAI-100 advised, if requested, of the investigation's progress and where the FAA IIC can be contacted during the investigation's field phase.

(14) Initiate or recommend emergency corrective action immediately by direct communication with AAI-200.

(15) Contact supervisory personnel or AAI-100 for instructions if unsure of actions to deal with uncooperative agencies or individuals.

(16) Inform the NTSB IIC of the FAA IIC's departure from the scene.

(17) Prepare and distribute FAA Form 8020-23.

(18) Consider safety recommendations in accordance with chapter 1, paragraph 16.

(19) The FAA IIC can also be the initiator of enforcement action if warranted.

(20) Destroy files maintained by the FAA IIC when necessary corrective action or follow-up is completed.

## 5. FAA Participant Responsibilities.

a. For NTSB/FAA-conducted investigations, FAA participants will:

(1) Report to the FAA IIC for group assignment.

(2) Participate in the investigation as a group member directed by and until released by the group chairperson.

(3) Be alert at all times to FAA responsibilities described in paragraph 8 and report any observed deficiencies to the FAA IIC as soon as possible.

(4) Report to the FAA IIC upon being released by the NTSB group chairperson at the end of each day's activities and before departing the scene at the close of the investigation.

(5) Furnish the FAA IIC with a copy of each exhibit and/or item of information obtained during the group investigation.

**b.** For FAA-conducted investigations, FAA participants will report to the FAA IIC for assignment of such duties as the FAA IIC will require during the investigation.

# 6. FAA IIC Initial Actions.

**a.** Determine the presence of a biohazard area.

**b.** Ensure that the emergency locator transmitter has been deactivated (remove batteries, antenna, etc.). This action is necessary to preclude its continued operation or reactivation during aircraft wreckage removal.

**c.** Verify that FAA Form 8020-9 has been sent by AT. If the information has not been sent, obtain the information, relay it to the nearest AT facility, and confirm that it transmits the information.

**d.** Organize the investigation and assist the NTSB with its investigation if NTSB is on-scene.

e. Arrange for security at the accident scene. Determine if hazardous materials are on the aircraft and request special assistance if necessary. Agricultural accidents may require arrangement of accident scene security if hazardous materials are on the aircraft.

**f.** For fatal accidents, local coroners or medical examiners will usually conduct an autopsy on deceased flightcrew. Contact local coroner or medical examiner to ensure bodies are not embalmed until after specimen collection and autopsy. (See paragraph 7i.) If local authorities are reluctant to conduct an autopsy, contact CAMI Autopsy Team (AAM-630) for coordination assistance. Results of the autopsy along with a thorough accident analysis will help the NTSB determine if flightcrew incapacitation was a cause or a factor in the accident.

**g.** Section 1134 of Title 49 U.S.C. gives the FAA the following authority when the NTSB is not on scene:

The Board is authorized to examine the remains of any deceased person aboard the aircraft at the time of the accident, who dies as a result of the accident, and to conduct autopsies or such other tests thereof as may be necessary to the investigation of the accident: provided, that to the extent consistent with the needs of the accident investigation, provisions of local law protecting religious beliefs with respect to autopsies will be observed.

**h.** Coordinate with NTSB on NTSB-conducted investigations prior to departure to the accident scene. The FAA IIC should not delay departure to the accident scene for the sole purpose of traveling with the NTSB IIC (see paragraph 8 for procedures when FAA personnel arrive at the scene prior to NTSB personnel).

**i.** When the FAA IIC's travel time will not allow him or her to arrive within a reasonable time, telephone calls should be made to relay FAA concerns to the on-scene public safety official (sheriff, police, etc.). Discuss the items in paragraph 7 with the public safety official.

**7.** Arrival at Accident Scene. The FAA IIC should make an initial familiarization visit to the accident scene to establish the status of or accomplish the following:

**a.** Rescue operations (who, where, when).

**b.** Wreckage security. Treat accident scene like a crime scene.

c. Site safety (see paragraph 13), including bio-hazards and ballistic recovery systems.

**d.** Notification procedures. Verify that NTSB and the Washington Operations Center were notified by the Cornerstone Regional Operations Center (C-ROC).

e. Emergency locator transmitter should be deactivated.

**f.** Flight data and cockpit voice recorders, if installed, should be located and secured.

g. Perishable evidence. This must be documented quickly or preserved.

h. Victim identification. Contact law enforcement officers.

**i.** Autopsy and toxicology studies. Contact law enforcement and local coroner to determine autopsy status and provide them with toxicology boxes and updated CAMI toxicological services guidance.

(<u>http://www.faa.gov/education\_research/research/med\_humanfacs/aeromedical/forensictoxicol</u> <u>ogy/</u> for current downloadable guidance). Contact the CAMI Autopsy Team (AAM-630) for assistance in coordination if you have difficulty coordinating autopsies with local authorities.

**j.** News releases (see paragraph 20).

**k.** Photographic documentation should occur before wreckage is moved.

**l.** Wreckage recovery and movement. Delay until perishable evidence and photographic documentation are complete.

**m.** Names, addresses, and telephone numbers of witnesses are obtained from law enforcement officers.

**8.** When NTSB is in Charge, but FAA Inspector Arrives First. Whenever possible, the FAA IIC should coordinate FAA's initial on-scene actions with the NTSB IIC before the arrival of the NTSB at the accident scene. Suggested actions are as follows:

**a.** Establish contact with local law enforcement officials and request accident scene security by such officials.

**b.** Arrange for preservation of the wreckage.

**c.** Ensure that power to the cockpit voice recorder is off and remains off (to prevent erasure of recorded information) until the recorder is removed by authority of the NTSB.

**d.** Do not delay or prevent removal of remains. However, the cooperation of local authorities should be solicited so that human remains are not removed before comprehensive photographic documentation is completed provided that an undue time delay is not expected. If remains are removed before the photographic documentation of injuries, note injury evidence and tag the location.

**e.** Make a preliminary survey of the wreckage site. Initiate preliminary investigations as requested by the NTSB and establish and maintain security until the arrival of NTSB personnel. Collect preliminary data (name and address information) from witnesses. Wait for an NTSB investigator to conduct in-depth witness interviews, except in the case of transient witnesses.

**f.** Comply with NTSB regulations in Title 49 CFR 830.10 which state that before the arrival of an NTSB investigator or an authorized NTSB representative:

"...(b) 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 will be made, if possible, of the original positions and conditions of the wreckage and any significant impact marks."

**g.** Monitor accident site security. NTSB regulations permit only persons authorized by the NTSB IIC or the Director, NTSB Office of Aviation Safety, to participate in examination of wreckage, records, mail, or cargo in NTSB's custody. At times, well-meaning guards, not knowing the reasons for the NTSB request for complete security, may allow unauthorized personnel access to the scene before NTSB investigators arrive.

**h.** Do not allow anyone to disturb the involved portion of the wreckage when evidence of an explosion is recognized, except for removal of casualties and remains, until the arrival of the Federal Bureau of Investigation or FAA explosives investigation specialists. If the center of the explosion is disturbed, critical evidence can be lost, i.e., the type of explosive device employed which, in turn, might preclude apprehension and conviction of the perpetrator.

**9.** Accident Scene Access. It is appropriate to review the statutes and regulations under which inspectors may demand immediate access to the accident scene when conducting

inspections for NTSB or FAA. If the inspector has difficulty gaining access to inspect and photograph the accident scene, quote from Title 49 U.S.C. or refer person(s) refusing the inspection to paragraphs 9a and b. Remind them that aircraft accident and incident investigations are a Federal matter, and that 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. The United States Government has custody of the wreckage by law and that custody will be released upon completion of the investigation by completing NTSB Form 6120.15, Release of Aircraft Wreckage and Receipt of Aircraft Parts.

**a.** Title 49 U.S.C. and 49 CFR 831.9 require any person having custody of an aircraft, or other property involved in an aircraft accident, to permit accredited NTSB investigators to have access to the aircraft and/or the accident scene and conduct all inspections necessary for a proper investigation.

**b.** Any person who refuses to grant access to an aircraft or wreckage after proper demand by inspectors will be subject to civil penalties of up to \$1,000 under Section 46301 of Title 49 U.S.C.; and/or criminal penalties up to \$5,000 in fines, or 1 year in jail, or both; and/or an injunction issued by a U.S. district court.

**c.** If confronted with a person who resists granting access, the investigating inspectors should first inform that person of the above statutes and regulations. If access is still not granted, the investigators should immediately notify their FSDO manager who, through the region, should arrange for the Chief Counsel's office to take vigorous legal action to secure access and institute enforcement proceedings if access is not granted. The regional Flight Standards division and the Chief Counsel's office should also notify appropriate NTSB elements of the progress of such situations.

# 10. Organization and Conduct of the Field Investigation.

**a. Organization**. Before or after the accident scene familiarization visit, the FAA IIC should hold an organizational meeting. The organizational meeting for most accidents may be an informal conversation involving an FAA IIC and one or more of the following: FAA participants, or aircraft operator, owner, or manufacturer representatives. The purpose of the meeting is to define briefly the FAA's responsibilities, procedures, and objectives; investigation participants are also apprised of what is expected of them.

**b. Investigation**. After completing the organizational meeting and ensuring the documentation and/or preservation of perishable evidence, e.g., human factors data, fuel samples, pressurized systems, and transient witnesses, the FAA IIC must expedite the onscene investigation. Photographs of the accident scene are a good place to start. Printed labels placed in the photographed scene ensure permanent records of identification and orientation. Generally, color photographs are superior to black and white photographs for investigations.

Digital photographs should be taken of the following, prior to the wreckage being disturbed:

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

**NOTE**: These views should be documented while "walking around the clock" in a circular fashion to ensure that a 360-degree view of the main wreckage site is completed with a series of six photographs; i.e.12, 2, 4, 6, 8, 10 o'clock positions. If possible, photographs should be marked to be easily identifiable (e.g. direction of flight, forward, aft, left, right.). Additionally, photos should be taken of any major structural component or flight controls no longer attached to the main wreckage.

- (2) Surrounding Terrain
- (3) Ground Scars leading up to the wreckage
- (4) Tree strikes or other object damage (if any)
- (5) Airframe ice (if any is adhering to leading edges of aerodynamic surfaces)
- (6) Wings and Tail
- (7) Control surface positions
- (8) Control surface actuator positions (if possible)
- (9) Trim tab settings (cockpit and airframe)
- (10) Flap and flap lever positions
- (11) Landing gear and lever positions
- (12) External views of engine(s) and associated engine controls
- (13) Turbocharger ducting and clamp positions (if installed)
- (14) All parts including control cables (marked prior to being cut by recovery personnel)
  - (15) Overall view of cockpit
  - (16) Close-up view of cockpit instruments (no more than four instruments to a

## photograph)

- (17) Electrical switch positions and circuit breakers
- (18) Throttle quadrant
- (19) Fuel selector switch
- (20) Magneto switch position(s)
- (21) Throttle quadrant
- (22) Seat belts

**c.** Documentation. Further documentation by notes, measurements, etc., is necessary to complement even the most thorough photographic coverage. Suggested documentation subjects include:

(1) Wreckage distribution.

(2) Body distribution.

(3) External flight control positions, e.g., rudder, elevator, ailerons, flaps, slats,

spoilers, stabilizers, and tabs.

(4) Cockpit flight control indications.

(5) Cockpit instrument readings.

(6) Abnormalities in cabin and cockpit areas.

(7) The GPS coordinates of the main wreckage should be documented. (Additionally, the GPS location or direction and distance from the main wreckage of any major structural component or flight control no longer attached to the main wreckage should be documented).

(8) Fuel and other fluid quantity as well as any evidence of fuel or oil spillage at the accident site.

(9) Fuel color and quality. The location from where the fuel is drained (i.e., Water in the fuel? Contaminates?).

- (10) Condition of all visible fuel, lube and air lines
- (11) Evidence of fluid leaks (fuel, oil, hydraulic)
- (12) Spark plug or ignition leads
- (13) Aircraft configuration (flap position, landing gear, etc.)
- (14) Possible explosives on board (fire crackers, parachute, etc.)
- (15) Contact information of all witnesses and officials.

**d. Investigation Suggestions.** During the investigation, certain evidence will require more detailed examination. The knowledgeable, experienced investigator is continually evaluating evidence as a possible causal factor. A complete list of causal or contributing factors does not exist. The following suggestions may stimulate the investigator's analysis:

(1) Missing extremities: wing or horizontal stabilizer tips, vertical stabilizer tip, propeller, or rotor tips, missing flight control surfaces: rudder, elevators, ailerons, flaps, stabilizers, spoilers, slats, tabs, etc., missing structure.

- (2) Pre-impact versus post-crash fire evidence.
- (3) Metal fatigue versus instantaneous breaks.

- (4) In-flight versus impact breaks.
- (5) Overloading or out-of-center-of-gravity evidence.
- (6) Evidence of aircraft attitude at impact.
- (7) Controlled versus uncontrolled attitude at impact.
- (8) Engine power at impact.
- (9) Systems operation before impact.
- (10) Flight control problems.
- (11) Evidence of an explosion (fire crackers)
- (12) Cockpit documentation.
- (13) Evidence of impact before final contact with terrain: trees, wires, buildings,

terrain, poles, obstructions.

- (14) Witnesses (contact information).
- (15) Aircraft performance.
- (16) Meteorological conditions.

e. The following precautions should be taken prior to wreckage removal:

(1) Do not rotate the propeller or any other components to avoid post crash damage. Avoid pulling of flight control cables, trim cables, and engine control cables, unless there is a specific investigative purpose in doing so.

(2) Protect the ends of failed major structural components from further post mishap damage.

(3) Do not disassemble precision components in the field due to the potential loss of evidence; e.g. air pumps. These components need to be examined in a laboratory environment, preferably by the manufacturer.

(4) Remove electronic (digital) components only after documenting 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 management, GPS navigators, communications radios, primary and navigation flight displays, etc., contain non-volatile or battery powered memory that may be accessed for retrieval of event data useful during the investigation.

(5) Disconnect all battery (newer aircraft may have multiple) connections to protect digital memory components.

(6) If any engine control, valve, or electrical switch is moved during the recovery process, such movement should be documented.

# 11. NTSB Team Concept.

**a.** NTSB uses the team concept for the investigation of all major aircraft accidents. The formal investigation involving wreckage recovery, security, field investigation, public hearings, and report writing is conducted under the direction of an NTSB IIC. Technical specialists are assigned to groups in two areas:

Operations	Airworthiness
Air Traffic Control	Flight Data Recorder
Airports	Aircraft Performance
Cockpit Voice Recorder	Maintenance Records
Human Performance	Powerplants
Operations	Structures
Survival Factors	Systems
Meteorology	
Witnesses	

**b.** NTSB technical specialists chair the investigation groups and are assisted by FAA participants, technical specialists who represent the State of registry, the operator, crew organizations, manufacturers, and other selected experts. The primary function of each group is to examine all facts in their area. The secondary function is to apprise the other groups of findings. Communication on findings is accomplished through a daily progress meeting conducted by the NTSB IIC. Frequently one group uncovers information that may be a lead for another group.

**12. Investigation Equipment**. Flight Standards division managers will provide each FSDO or International Field Office in their region with the necessary clothing, biohazard gear, and equipment for accident investigation. A suggested equipment list is given in Appendix 1.

**13. Investigator Safety.** Safe investigative practices and common sense safety precautions are of vital importance but are often overlooked during an investigation. Each investigation participant must consider several items including the following:

- **a.** Good health is a prerequisite.
- **b.** Sound physical condition for withstanding strenuous outdoor activity is a necessity.
- c. Control of one's emotions due to the disruptive effect of a disaster is a necessity.
- d. Calm and competent behavior to preclude frantic or ill-advised action is a necessity.
- e. Suitable gear for the climate and terrain is needed upon arrival.
- **f.** Wearing gloves when handling wreckage is mandatory.

g. Hardhats should be worn when working inside or under wreckage.

**h.** Advice of local experts such as forest rangers, mountain rescue teams, surveyors, and law enforcement personnel on the type of protection needed should be followed.

**i.** The effects of fatigue on the safety of one's performance long before total exhaustion takes place should be understood.

**j.** The workload should be adjusted to the circumstances: more may be accomplished in a well organized 6-hour day than in an unorganized 12-hour day.

**k.** The quality of the investigation is best served by an awareness of the need for mental alertness and physical fitness.

**l.** At high elevations, portable oxygen and other emergency equipment should be available.

**m.** Unexpected weather or equipment failures may isolate the investigation team in remote areas; therefore, provisions for first aid, shelter, food, water, and fuel should be made before the need arises.

**n.** The buddy system and a logging in and out system for personnel for remote area operations should be used.

**o.** Reliable communications between the investigation headquarters and the various activity scenes should be maintained by telephone, walkie-talkie, or long-range radio equipment.

**p.** The use of helicopters at inaccessible accident scenes is extremely dangerous; coordination between the helicopter crew and the investigating team is a must.

**q.** Working around heavy equipment is very dangerous and demands the same observance of safety measures as does that of helicopter use.

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

s. The following potentially hazardous items or situations may be encountered:

(1) Sharp, jagged pieces of metal. Wreckage may shift.

(2) Fuel and other flammable agents. Toxic agents may be present with a fire.

(3) Ignition sources: hot metal, battery (may also explode), ignition wires, electrical wires, grass or wood fire, or any explosive agent. Tires may explode.

(4) Hazardous materials from the aircraft or at the scene.

(5) Still-loaded aircraft systems, including: fuel and oil, pneumatic, hydraulic, electrical, and oxygen. Remember that controls may move.

(6) When involved with a military aircraft be cautious for unexpected ordinance and other ballistic devices such as ejection seats, flares, and jettisoning systems.

(7) Aircraft with ballistic recovery (parachute) system and ejection systems.

(8) Composite Fibers – BioHazard Equipment does not provide proper protection. Floor wax can be sprayed on the area to contain the fibers.

(9) On frozen water, ice may give under wreckage.

(10) Possibility of snakes and other dangerous insects.

t. Lacerations from wreckage where human remains are present will require a gamma globulin injection to prevent hepatitis B. This must be done within 72 hours.

**14.** Airman and Aircraft Records. The FAA is prohibited from releasing the medical records of any living person without the individual's consent.

**a.** A certified copy of the airman's FAA certificate history may be obtained from the Airmen Certification Branch, AFS-760.

**b.** A certified copy of the airman's FAA medical history may be obtained from the Aerospace Medical Certification Division, AAM-300.

**c.** A certified copy of the aircraft historical records may be obtained from the Aircraft Registration Branch, AFS-750.

**15. Post-Accident and Incident Drug Testing**. Post-accident and incident drug testing must be conducted in accordance with current DOT and FAA directives.

**16.** Airworthiness Investigations. An FAA airworthiness investigation will be conducted whenever:

**a.** Preliminary data indicate an in-flight structural failure or designor manufacturing-induced malfunction of a powerplant, aircraft system, or component.

**b.** Requested by the responsible Aircraft Certification Directorate or Director, Aircraft Certification Service, AIR-1, Washington, D.C.

**c.** Directed by AAI through AAI-100.

# 17. Crashworthiness Investigations.

**a.** Determine early in the investigation if an FAA crashworthiness investigation is needed.

Consider the following conditions in making this determination:

(1) The pilot compartment or cabin or some occupiable portion remains relatively intact, and the occupants were injured seriously by the surrounding structure or the failure of seats, body, or cargo-restraint systems.

(2) The aircraft structure was destroyed by impact and/or fire and any occupant survived.

**b.** When a crashworthiness investigation is undertaken, the following items, when pertinent, will be investigated for inclusion in a crashworthiness report and documented with photographs or sketches if possible:

(1) The approximate magnitude and direction of major impact forces.

(2) The final ground trajectory of the aircraft.

(3) The condition of the entire aircraft, including the interior and evidence of injuries to occupants as a result of failed components or detached objects. Include the progression of structural failure of the passenger compartment.

(4) Any floor deformation and its relevance to any seat failures.

(5) The number, location, type, and condition of seats and belts. Include the direction in which the seats were facing before and after impact.

(6) The condition of galleys and other items of mass. List all items that separated from the structure which may have injured passengers or crew. Relate failures to structural design.

(7) Any design features such as apparent inadequately padded seat backs, food tray storage, bulkhead-reinforcing members, lower seat structure, etc., that may have contributed to injuries.

(8) The evacuation procedures. Identify the exits used and the number of persons who used each exit.

(9) If all exits were operable and usable from inside and outside.

(10) If entry was made through any exit from outside.

(11) The performance of the emergency equipment such as the emergency interior lighting systems, slides, ropes, etc.

(12) If the emergency exit markings and operation placards, both inside and outside, were adequate.

(13) If any obstructions could or did restrict the use of any doors or emergency exits.

(14) The system used for directing the aircraft evacuation. Comment on the adequacy of the system.

(15) Items that stood out as being useful in the evacuation.

(16) The performance of cabin-class dividers. Also describe location of dividers in relationship to exits, divider curtains or doors, and aisle-width-through dividers.

(17) If evacuation from the inside or assistance from the outside was hampered by smoke, fire, etc.

(18) The exterior light conditions.

(19) The seat number of each occupant.

(20) Description of cause of death and secondary injuries of all deceased occupants and description of injuries to all other occupants.

(21) If findings in the aircraft correlate with the victim's injury patterns (consult the CAMI Protection and Survival Research Laboratory or the CAMI Autopsy Team (AAM-630)).

## 18. Public Aircraft.

**a.** An FAA inspector from the FSDO notified by NTSB or other sources of a public aircraft accident or covered incident will investigate the occurrence. Public aircraft are not subject to all the same CFR's that apply to civil aircraft. Therefore, the investigation will only be to the extent necessary to determine if any of the FAA's nine areas of responsibility are involved. If an FAA area of responsibility is involved, the investigation will be handled in the same manner as for a civil aircraft. The FAA is not required or authorized to:

(1) Conduct a formal accident investigation, except when a written authorization exists; or

(2) Accept accident or incident delegation responsibility from any group or organization.

**b.** Investigations conducted by the organization owning or having operational control of the aircraft, i.e., city, State, Federal agency, etc., will be conducted under its jurisdiction. Primacy of the investigation will be retained by that authority. FAA Form 8020-23 will be completed and forwarded to the regional Flight Standards division within 30 days. The regional Flight Standards division will send the original FAA Form 8020-23 for accidents and incidents to AFS-620 and a copy of FAA Form 8020-23 *accident reports only* to AAI-220 within 15 days of receipt from district offices.

# 19. Ultralight Vehicles.

**a.** The NTSB supports FAA's policy in 14 CFR 103 of allowing the ultralight vehicle community to develop their own ultralight vehicle ("ultralight") safety programs. The NTSB will not investigate ultralight accidents other than for two-place ultralight vehicles which are registered aircraft. The FAA will not investigate unregistered ultralight vehicle accidents or compile an accident or incident report.

**b.** However, 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. The determination of FAA involvement is delegated to the inspector assigned to accident standby duty. While an assessment of the extent of involvement can be made by telephone, it is usually difficult to determine compliance without going to the accident scene. It is the responsibility of the aviation safety inspector to determine if the vehicle was an ultralight under 14 CFR 103 or was an unregistered aircraft.

**c.** If there were fatalities, if there was a conflict with other aircraft operations over a congested area, if there was buzzing, if a two-place ultralight was involved, etc., these factors may indicate violations of 14 CFR and that an on-scene investigation is necessary to document areas of noncompliance. If widespread accident publicity is anticipated, e.g., a prominent person is involved, AAI-100 should be advised of the occurrence by telephone through the Cornerstone Regional Operations Center. FAA Form 8020-9 is not to be used for ultralight vehicle accident notification. No accident form is required.

**20.** Release of Information. This subject is covered in detail in Chapter 9. In summary, when NTSB is in charge of an investigation, it makes all releases. When FAA is conducting the investigation, the appropriate regional Office of Communications (or headquarters) will make releases in coordination with the FAA IIC.

**21.** Coordination with other FAA offices. The FAA IIC will contact the local FAA office, facility, or region with requirements for information, equipment, or personnel. Offices will provide the requested information and assistance by the most expeditious means available. The FAA IIC should receive a copy of the transcript of the cockpit voice recorder tape and the flight data recorder tape when NTSB makes such transcripts. When NTSB does not make such transcripts, the FAA IIC may request recorder readouts through AAI-100.

**22.** Cooperation with States, Agencies, and Others. FAA district office managers and inspectors are expected to maintain a cooperative working relationship with other Federal

agencies, state aviation commissions, state and local police, fixed base operators, airport managers, and other groups and individuals having aviation interests or responsibilities.

**a.** Inspectors are expected to familiarize themselves with state and local regulations on accident reporting in their area. While FAA personnel are expected to work in cooperation with state and local aeronautical groups, nothing in this order or other orders will be interpreted to mean that FAA has delegated any of its accident investigative authority or responsibility to such parties. Further, the FAA IIC is not relieved of investigative responsibilities because another agency or governmental unit has investigated, or intends to investigate, the occurrence.

**b.** FAA's policy is to cooperate with all public and private research agencies in the free exchange of accident data and in the conduct of accident studies in the interest of flying safety. All special studies, including requests for such information, must be coordinated through AAI-100.

# 23. Investigation Conclusion.

**a.** The NTSB IIC will not release the wreckage until FAA agrees that it is no longer needed. If FAA requests NTSB to retain control of the wreckage for a period beyond NTSB's investigative needs, the request may be granted for a period not to exceed 60 days from the request date. FAA will bear the storage and security costs, if any, for this additional period.

**b.** The field phase of an investigation may be considered complete when, in the judgment of the FAA IIC, 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:

(1) Receipt and retention of aircraft parts using FAA Form 8020-2, Aircraft/Parts Identification and Release.

(2) Notification of parties to the investigation of associated investigation projects.

(3) Release of FAA participants.

(4) Satisfaction 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.

(5) Establishment of a target date for completion of the accident report.

**24. Registration Certificates**. When an aircraft is destroyed or damaged to the extent that repair is unlikely, the owner or the owner's agent is required to request cancellation of the registration certificate.

**25.** Aircraft Data Plates. Aircraft data plates from destroyed aircraft present a unique problem because entire aircraft have been rebuilt around a recovered and resold data plate. There is no legal basis for an inspector or investigator to retain the data plate from a destroyed aircraft. However, the inspector or investigator will remove the data plate with the permission of the owner or insurance company, deface or destroy the plate, and then return it to the owner or the insurance company. Disfiguring the data plate will eliminate its future usefulness and resale value. Lastly, advise AFS-750 in Oklahoma City that the aircraft was destroyed.

**26.** FAA Deficiencies. Deficiencies identified during the investigation that are related to the FAA's nine areas of responsibility will be annotated on FAA Form 8020-23 (see Appendix 3) with a brief description of the deficiency. It is incumbent on the inspector or investigator to determine if corrective action is needed. If such action is needed, the inspector or investigator will prepare and forward a safety recommendation(s) in accordance with paragraph 15.

**27. Design Deficiencies.** If, during an accident investigation, it is ascertained that a deficiency may exist in the design of an aircraft, the FAA IIC will take immediate action to inform AAI-200 in accordance with paragraph 15.

**28.** Accident Investigation Quality Assurance Program. The Office of Accident Investigation is responsible for implementing an automated Accident Investigation Quality Assurance Program to aid management in meeting its mandated responsibilities. The Office of Accident Investigation must receive enough information about each accident to determine that:

**a.** The accident was investigated thoroughly and FAA's nine areas of responsibility were reviewed.

**b.** Corrective action(s) was or will be initiated.

c. Identification of operational and technical factors that may have been involved.

**29. Quality Assurance Program Objectives.** The quality assurance program for accident investigations has the following objectives:

**a.** That the level of participation in the investigation be adequate to carry out FAAmandated duties and responsibilities. Accidents, by definition, represent a failure in the NAS. Thus, a determination must be made of where the failure occurred. An investigation must determine if it was a human factors failure; a mechanical failure of airframe, engine, or equipment; an ATC error caused by flight operational procedures; or another possibility.

**b.** That thorough investigations be conducted by trained personnel. The FAA IIC should therefore be trained thoroughly in investigative techniques.

**c.** That investigation results be reported in a complete, accurate, and timely manner and documented on FAA Form 8020-23 with the FAA IIC's analysis of the involvement of FAA's nine areas of responsibility (see paragraph 35).

**d.** That corrective action is taken whenever any of FAA's responsibilities are involved.

#### **30.** Quality Assurance Data.

**a.** Data from FAA Form 8020-23 are entered into a quality assurance database that shows performance in a number of areas including:

- (1) FAA and/or NTSB participation.
- (2) If participants went to the accident scene.
- (3) Reporting on FAA's nine areas of responsibility.
- (4) Name of reporting inspector.
- (5) Corrective actions proposed.

**b.** As data accumulate in each area, norms will be quantified and used to develop regional and district office benchmarks against which to measure performance. The benchmarks will then be used to identify substandard and superior performance in each area.

**c.** Periodic reports developed from the database will be forwarded to regions for their information and action, as appropriate.

## 31. Completion and Distribution of FAA Form 8020-23 (For Accidents).

**a.** FAA Form 8020-23 will be completed and distributed within 45 days of each accident to the Flight Standards Service - Aviation Data Systems Branch, AFS-620, and the Office of Accident Investigation, Recommendation and Analysis division, AAI-200. Each Flight Standards District Office (FSDO) has 30 days to complete and forward the FAA Form 8020-23 to the regional point of contact. The regional point of contact has 15 days to review FAA Form 8020-23 to verify that information has been provided on the form. The regional point of contact then forwards the original form to AFS-620 and a copy to AAI-200. New information will be forwarded after the original submission on an amended FAA Form 8020-23 which should *only contain updated information*. The amended FAA Form 8020-23 will then be forwarded through the original distribution process.

**b.** FAA Form 8020-23 will be submitted to indicate that an aircraft is missing. All persons aboard an aircraft missing 30 days or more will be considered fatalities. An amended form will be submitted after 30 days to report the fatalities.

**c.** If an accident is downgraded to an incident, the FAA IIC will submit, through the normal distribution, an amended FAA Form 8020-23 indicating the downgrade.

**d.** FAA Form 8020-23 is releasable through FOIA. Prior to any release, it should be reviewed to determine whether any of the information must be redacted in accordance with a FOIA exemption.

e. FAA Form 8020-23 is in Appendix 2.

**f.** Destroy all information relative to the accident if no other actions are anticipated at the conclusion of the investigation.

**32.** Accident Investigation Quality Assurance Awards Program. The Office of Accident Investigation has implemented a program which recognizes the Aviation Accident Quality Assurance Region and FSDO of the Year. Selection is based on criteria that measure the involvement, quality, timeliness of the investigations performed, identification of responsibilities, and submission of safety recommendations.

# Chapter 4. Accident Investigation, Reporting, and Quality Assurance Program Section 2. Accident Investigation Forms and Reports

# 33. FAA IIC Reporting Responsibilities.

a. Air Carrier and General Aviation Accidents. The FAA IIC is responsible for the following phases of investigation reporting for air carrier or general aviation accidents:

(1) Initial Phase. The FAA IIC will ensure that the information from FAA Form 8020-9 is or was transmitted by an ATC facility to provide notification that an aviation-related occurrence has taken place. This form is designed to provide the basic "who," "what," "where," and "when" information. AFS-620 uses the FAA Form 8020-9 message to open a computerized accident file in anticipation of receiving the accident report. If the occurrence is later downgraded from accident to incident status, the FAA IIC will ensure that a second message is transmitted as described in paragraph 65c.

Post-Field Phase. For all investigations, the FAA IIC should: (2)

(a) Request from the NTSB IIC copies of all pertinent notes and exhibits that NTSB acquired during NTSB-conducted investigations. This request includes the NTSB group chairperson reports.

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

(c) Request a verbal report from a participant if the participant is called away from the investigation before the FAA IIC can discuss the participant's NTSB group activities.

office.

(d) Complete FAA Form 8020-23 and forward to the Flight Standards regional

(e) Forward names of any deceased who held an airman's certificate to Civil Aviation Registry, AFS-700, Oklahoma City, Oklahoma, for removal from records.

**b.** Foreign Air Carrier Accidents. The FAA IIC for an accident which occurs in a U.S. jurisdictional area and which involves a foreign air carrier must notify the FSDO with 14 CFR 129 certificate responsibility for the foreign air carrier involved. The FSDO is responsible for informing the appropriate foreign government's aviation agency and the foreign air carrier's representative of the accident. The FAA IIC will also give notice of the accident through the Washington Operations Center to the International Policy and Operations Staff, API-10, International Aviation. The location of the FSDO with 14 CFR 129 certificate responsibility for each foreign air carrier is listed in the Air Operations System database available through the FSDO or regional Flight Standards division's computer. Accident reports will be completed and forwarded for all foreign air carrier accidents in a U.S. jurisdictional area in accordance with Chapter 5, Paragraph 4.

**34. Progress Reports**. After arrival at the accident scene, the FAA IIC must, as soon as possible, make an initial telephone progress report through the Washington Operations Center to AAI-100 on all available information when the accident meets the following criteria: the accident is of a catastrophic nature, is of strong public interest, is a nationally newsworthy occurrence, or is of special interest to AAI-100. In these cases, the Washington Operations Center will arrange a telecon with the Regional Cornerstone Operations Centers operations officer and other appropriate personnel. The need for continuing on-scene telephone reporting will be discussed with the AAI-100 duty officer. The FAA IIC will also give AAI-100 the location and telephone number of the NTSB command post or a telephone number at which the FAA IIC may be contacted during the field phase.

# 35. FAA Participant Reporting Responsibilities.

**a.** Participants will report directly to the FAA IIC.

**b.** Participants in accident investigations conducted by NTSB or by the military will make reports as requested by NTSB or the military group chairperson. When group chairperson reports are received for coordination, participants will either concur or nonconcur with the report. When an FAA participant nonconcurs, the participant will inform the group chairperson in writing and give the reason(s) for nonconcurrence. A copy of the nonconcurrence will be furnished immediately to the FAA IIC and to AAI-100. Also, participants will make an immediate verbal report followed, as soon as possible (if requested by the FAA IIC), with a written report to the FAA IIC whenever any of the following exists:

(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.

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

- (5) Federal Aviation Regulations were adequate.
- (6) Airport certification safety standards or operations were involved.
- (7) Airport security standards or operations were involved.
- (8) Airman medical qualifications were involved.
- (9) Federal Aviation Regulations were violated.

# 36. FAA Form 8020-2, Aircraft/Parts Identification and Release.

**a.** Title 49 U. S. C. gives FAA the authority to examine and test parts as reasonably necessary when conducting investigations. The FAA IIC should obtain the parts directly from the owner or the owner's authorized representative, coordinate with the aircraft owner, when possible, before disassembly of parts/components, and bring the following to the owner's attention:

(1) The FAA IIC should contact the NTSB for funding authorization prior to committing funds.

(2) FAA is not obligated to reassemble the components but does pay for their return to the owner.

(3) The owner has the right to participate in the investigation.

**b.** When parts such as instruments, avionics, carburetors, magnetos, or electrical parts will be sent to a facility (manufacturer, laboratory, etc.) for analysis, do not disassemble the parts in the field. Carefully package and ship the parts in as-found condition to ensure that the part is, as far as practicable, in the as-found condition when it arrives at the destination.

**c.** Tag each part with FAA Form 8020-2, each copy of which will contain NTSB investigation number (see Appendix 2). FAA Form 8020-2 will be used as follows:

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

(2) Retain a signed copy.

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

(4) Include information on the parts tag and the carrier's bill of lading advising the recipient to contact the local FAA representative before opening or processing the package.

(5) Include the following information on the carrier's bill of lading under description of articles:

(a) Make, model, and aircraft identification number.

- (b) Place and date of occurrence.
- (c) Part name and number.

**d.** The sending office should contact that FAA representative before sending the part, give the expected time of arrival of the part, and arrange for the representative's participation as needed in the processing.

e. The parts should not be exposed to public view. Large or heavy parts should be boxed or crated.

**f.** When parts are sent to the ACO responsible for that product's design approval, they will be shipped as the ACO directs. The parts will be properly identified in a letter of transmittal that briefly describes the accident and the reason for the examination.

**g.** The ACO will ensure that the parts are examined and that action is taken to correct aircraft, engine, or component service difficulties.

**h.** When the ACO completes its examination of the parts, an original and three copies of the examination report will be forwarded to the FAA IIC.

**i.** The FAA office that examines the parts will return the parts to the owner with a receipt such as FAA Form 8020-2 made out in triplicate. The owner should be asked to return the original and one copy to the sender. The copy should then be forwarded to the FAA IIC.

**j.** The NTSB lab is available for use by the FAA, and any such requests will be through the Office of Accident Investigation.

# 37. FAA Form 8020-23, FAA Accident/Incident Report.

a. Completion of FAA Form 8020-23 for Accidents.

(1) FAA Form 8020-23 will be completed by the FAA IIC and distributed to the Regional Flight Standards division within 30 days of each accident. The Regional Flight Standards division point-of-contact will have 15 days to forward the original FAA Form 8020-23 to AFS-620 with a copy to AAI-200 (for accidents only).

(2) Any new information identified after the original submission will be coded on an amended FAA Form 8020-23 and forwarded through the original distribution process.

(3) FAA Form 8020-23 will be submitted to indicate an aircraft is missing. All persons aboard an aircraft missing 30 days or more will be considered fatalities. An amended FAA Form 8020-23 will be submitted after 30 days to report the fatalities. (Same as paragraph 31b)

**b.** Distribution of FAA Form 8020-23, for Accidents.

(1) Basic Distribution.

(a) FAA Form 8020-23 will be completed by the FAA IIC within  $30 \ days$  of each accident.

(b) Revisions to the form will be sent as an amendment through the normal distribution.

(2) Distribution of 8020-23 Form for Accidents Involving:

(a) *Holders of an operating certificate:* copy to the operator's certificate-holding district office.

(b) An air traffic control facility: copies to service area and the facilities involved.

(c) *The airworthiness of an aircraft, engine, or propeller:* copy to the appropriate Aircraft Certification Directorate (see Appendix 1) and a copy to the Aircraft Maintenance Division, AFS-300.

(d) *Emergency evacuations:* copy to the Air Transportation Division, AFS-200, within 10-workdays of the occurrence.

# 38. NTSB Form 6120.15, Release of Aircraft Wreckage and Receipt of Aircraft Parts.

**a.** FAA-Investigated Incidents. For FAA-investigated accidents or incidents, use FAA Form 8020-2 when the investigation is complete to release the aircraft or any of its parts to the registered owner. Do not use NTSB Form 6120.15.

**b.** NTSB-Investigated Accidents or Incidents. NTSB will release the wreckage of all accidents or incidents that it investigates. If FAA needs to examine the wreckage further after NTSB has completed its investigation, the FAA IIC should request the NTSB IIC to retain possession of the wreckage or to release the wreckage to FAA via NTSB Form 6120.15. The FAA IIC will re-release the wreckage with a FAA Form 8020-2.

**39.** NTSB Form 6120.9, Passenger Statement; and NTSB Form 6120.11, Statement of Witness. When NTSB is in charge of an investigation, it will conduct passenger and witness interviews and obtain statements. For accidents in which the NTSB is not on-scene, the FAA performs this function. FAA personnel are to use plain stationary for obtaining statements. One of the investigator's first actions should be to obtain the names and addresses of passengers and witnesses. Good statements depend largely upon the interviewer. The interviewers 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. The qualifications of witnesses should always be considered.

**a.** Written Statements. Use FAA or plain stationary, do not use NTSB Witness Forms. It is good practice to have the individual give an oral account first. This gives the inspector an opportunity to develop the significant features of the testimony. Statements from the family physician, other professional sources, and relatives or close associates of the pilot should be obtained when medical aspects appear to be involved.

**b.** Oral Statements. A witness may refuse to provide a written statement but give oral testimony. Preface the written account of an oral statement with a brief explanation, e.g., "John Doe, age 42, a homebuilder, said he was working on a new house about 200 feet from the accident scene. He declined to give a written statement." Relate Doe's story accurately. A tape

recorder may be used, provided the witness gives consent. Indication of the consent must be included with the introductory statements at the beginning of the recording. Have a third person present for confirmation of the written account of the oral statement and have the third person sign the statement, certifying it to be what the witness stated.

**c.** Exclusion of FAA From Interview. In some NTSB investigations, a witness may wish to exclude FAA from the interview. The request will be honored; however, the witness will be requested to participate in a separate FAA interview. A witness that refuses to participate in a separate interview can and will be subject to appropriate enforcement action. The FAA IIC will immediately notify the Regional Counsel in the appropriate region and the Litigation Division, AGC-400, if FAA participation is denied.

## 40. NTSB Form, Preliminary Accident Report.

**a.** The NTSB uses this form to issue preliminary factual information to the public pending NTSB's release of the final report and the findings of probable cause.

**b.** The FAA IIC will notify the AT facility responsible for preparation of the AT accident package whenever the preliminary investigation indicates that the occurrence is to be downgraded to an incident. The AT facility will prepare an informal accident file on all downgraded accidents.

c. The "History of Flight" factual narrative may not exceed 200 words. The opening paragraph should include: (1) date of accident; (2) time of accident; (3) type of aircraft; (4) owner/operator; (5) accident type; (6) phase of operation; (7) purpose of flight; (8) flight plan, conditions, and IFR or VFR; (9) aircraft damage; (10) crew/personnel injury; (11) pilot certification; and (12) origin of flight (place, date, and time). An example follows:

On January 1, 1989, at 1550 EST, a Cessna 150, N1234, registered to Semico Aviation, collided with a snowbank on landing at Parker Airport, Duval, Maryland, while on a training flight. Visual meteorological conditions prevailed at the time, and a VFR flight plan was filed. The aircraft was substantially damaged, and the certificated flight instructor and student pilot were seriously injured. The flight originated at Pauley, Virginia, on January 1, 1989, at 1350 EST.

**41. NTSB Form 6120.1/2, Pilot/Operator Aircraft Accident Report.** The requirements for aircraft accident reporting by pilots and operators are set forth in Title 49 CFR 830.15. NTSB Form 6120.1/2 (see Appendix 2) is to be used for this purpose. The FAA IIC will not add to or alter NTSB Form 6120.1/2.

#### 42. Report Retention.

**a.** Report Retention. Flight Standards facilities and AAI will maintain copies of accident reports until all corrective actions are completed.

**b.** Destroy files maintained by the regional Flight Standards division and the FSDO when necessary follow-up or corrective action is completed.

# Chapter 5. Incident Investigation and Reporting

# Section 1. General

## 1. Overview.

**a.** 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 (AD's), revised procedures, standards, policy, etc. Support for such actions depends on facts discovered during the investigation. All relevant facts should be documented. The certificate -holding district office (CHDO) will be responsible for conducting all incident investigations classified as a pilot deviation for its assigned operators, regardless of geographic area in which the event occurred.

**NOTE**: Pilot Deviations that are not associated with the operations under 14 CFR parts 121, 135, or air operators under part 125 and fractional ownership programs under the operational control of a program manager under part 91 subpart K (91K), will continue to be investigated by the geographical office where the event occurred.

**b.** Some aircraft malfunctions are documented by use of a Service Difficulty Report (SDR), a Mechanical Interruption Summary, a Malfunction or Defect (M or D) 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. An example of this dual reporting requirement would be an aircraft with a pressurization system valve malfunction that resulted in an emergency descent maneuver. The malfunction would likely result in an SDR or M or D report. The emergency descent incident requires documentation on FAA Form 8020-23.

## 2. Incident Responsibilities.

**a.** The latest edition of Order 1100.2 assigns to the Technical Services Group, AJF (IT), the responsibility for collecting, automating, and analyzing airspace and surface incident reports (near midair collisions, operational errors, vehicle and pedestrian deviations, and pilot deviations). The latest edition of Order 1100.5 (FAA Organization-Field) assigns to the Flight Standards divisions the responsibility for incident investigation and reporting, except for vehicle and pedestrian deviations. In some instances, an aircraft incident may occur within one region's geographical area, but the aircraft may continue its flight to or through one or more regions prior to flight termination. In these instances, the Flight Standards division in the region in which the aircraft first lands following the occurrence is responsible for satisfying the FAA's investigative responsibilities, with the exception of pilot deviations and near midair collisions which are investigated by the respective CHDO. Vehicle and pedestrian deviation investigations at airports certificated under 14 CFR Part 139 are the responsibility of regional Airports divisions.

**b.** Regional Air Traffic division managers are responsible for investigating and reporting incidents that only involve Air Traffic functions, i.e., operational errors or deviations.

**c.** The FAA IIC has the responsibility to notify the regional Airports and respective Air Traffic organizations and the appropriate ACO when functions of these offices are involved in the incident.

**d.** The degree of participation by other FAA elements in an incident investigation and documentation depends on the extent of their involvement in the incident and on the requirement that all relevant facts be obtained. The FAA IIC may request participation or documentation by other FAA elements when necessary.

(1) The geographically located Flight Standards office will contact the certificate-holding district office (CHDO) of an air operator or air carrier at the point of initiating an investigation to determine if that office has either initiated the investigation or requires further on-site assistance. If the CHDO has already initiated the investigation and requires no further on-site assistance there is no need for the geographically located office to pursue further action.

e. The FAA IIC determines the extent of investigation necessary for an incident other than an NMAC or a pilot deviation before requesting an air traffic package.

**f.** When Air Traffic provides notification on FAA Forms 8020-11, 8020-17, or 8020-21, the flight standards investigating office will inform the reporting Air Traffic facility of the final disposition of the incident. When Air Traffic personnel or facilities are involved, the FAA IIC will give these parties an opportunity to comment and will indicate on the report that this opportunity was given.

# 3. Incident Notification.

**a.** Flight Standards District offices will normally receive telephone notification of accidents and incidents from an Air Traffic field facility or Cornerstone Regional Operations Center (C-ROC). For an incident other than a NMAC or a pilot deviation, and if written occurrence documentation is required from the Air Traffic facility, the district office inspector shall request the Air Traffic facility to provide a completed FAA Form 8020-11. For a reported NMAC, FAA Form 8020-21 must be filed via the Air Traffic Quality Assurance (ATQA) tool by the Air Traffic facility. For a pilot deviation, including a reckless flying incident observed by Air Traffic, FAA Form 8020-17 must be electronically filed via ATQA by the Air Traffic facility. Appendix 2 contains a flowchart of the flight standards accident and incident investigation process.

**b.** If a Flight Standards inspector receives notification of an occurrence from a source other than an Air Traffic facility or Cornerstone Regional Operations Center, the inspector shall immediately contact the nearest Air Traffic facility and provide the information the Air Traffic facility needs to complete its notifications.

**c.** If a Flight Standards inspector receives notification of an incident not observed by Air Traffic from a source other than Air Traffic, Flight Standards should proceed as follows: for reckless flying incidents, complete FAA Form 8020-17 via ATQA, followed by FAA Form 8020-18 via ATQA after the investigation; for other incidents, only complete FAA Form 8020-23 after the investigation.

**d.** In addition to accidents and incidents, the Washington Operations Center must notify AAI-100 of all incidents which have a significant impact on aviation safety; have threatened substantial

damage to property or aircraft or possible injury to personnel; or are anticipated by the FAA IIC, the FSDO manager, or the Flight Standards regional staff to be of national interest. An all-inclusive description of incident types that meet the above criteria is not practical. However, in deciding whether to advise AAI-100 of an incident, consider that AAI-100 has the responsibility for keeping the Director of Accident Investigation, the Director of Flight Standards Service, the Director of Aircraft Certification Service, the Federal Air Surgeon of the Office of Aerospace Medicine, the Director of Civil Aviation Security, and other FAA officials actively informed of the circumstances of such incidents.

**e.** If a flight crewmember notifies a Flight Standards inspector of a possible NMAC, the inspector shall be responsible for notifying the local Air Traffic facility which will then transmit the required message. Investigation of the report shall be completed in accordance with paragraph *111 of FAA Order 8020-16*.

**f.** Aircraft Certification Directorates should be notified with regard to certification responsibilities for which they have authority.

**g.** Regional Airports divisions will receive notification of vehicle or pedestrian deviations described in paragraph *116 of FAA Order 8020-16* from an Air Traffic field facility or the Cornerstone Regional Operations Center. A FAA Form 8020-24 completed via ATQA will follow the notification within 10 days.

**4.** 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 shall notify the FAA office having 14 CFR 129 responsibility for that foreign air carrier. The district office with 14 CFR 129 responsibility is responsible for informing the appropriate foreign government aviation agency and the foreign air carrier's representative of the incident. The FAA IIC shall also notify the International Policy and Operations Staff, API-10, of the incident through the Washington Operations Center. The location of the district office which has 14 CFR 129 certificate responsibility for each foreign air carrier is listed in the Air Operations System database in the district office or in the regional Flight Standards division's information processing equipment. FAA Form 8020-23 will be completed and distributed for each foreign air carrier incident.

**5. Report Retention**. For a NMAC or pilot deviation investigation, Flight Standards facilities will retain two copies of the preliminary and investigative reports and all supporting documents. For vehicle or pedestrian deviations, regional Airports offices will retain two copies of the preliminary and investigative reports and all supporting documents. The envelope containing this information should be retained in the facility's files according to instructions in the latest edition of Order 1350.15 unless directed otherwise. Note the following information on the front of the envelope:

**a.** The incident report number.

**b.** The date of the incident.

**c.** The aircraft identification data (for NMAC and pilot deviation investigations if applicable for vehicle or pedestrian deviation investigations).

**d.** A list of the envelope contents.
**6. Records Disposal**. Dispose of accident/incident records as follows, as described in the latest edition of Order 1350.15:

**a.** FAA Form 8020-23 (Reporting Incidents). Destroy files maintained by the regional Flight Standards division, FSDO, and Aircraft Certification Directorates when necessary follow-up or corrective action is completed.

**b.** FAA Forms 8020-21 and 8020-15. Destroy files maintained by the regional Flight Standards division, FSDO, and Aircraft Certification Directorates after 2.5 years. ATO-A(IT) maintains an electronic archive of incident reports.

**c.** FAA Form 8020-24. Destroy files maintained by the regional Flight Standards division, FSDO, and Aircraft Certification Directorates after 2.5 years. ATO-A(IT) maintains an electronic archive of incident reports.

# Chapter 5. Incident Investigation and Reporting Section 2. Investigation of Specific (Non-Criminal) Incidents

**7.** Near Midair Collisions (NMAC). Preliminary reports of all NMAC's are to be completed by Air Traffic on FAA Form 8020-21 via ATQA and sent to the appropriate FSDO. The inspector will then conduct the investigation, complete FAA Form 8020-15 via ATQA, and forward it as described in paragraph 7d. For Air Traffic reporting instructions, see FAA Order 8020.16.

**a.** The office responsible for investigating and reporting the NMAC shall be the FSDO in whose area the incident occurred.

**b.** The use of FAA Form 8020-15 is as follows:

(1) The inspector should document all factors involved in the incident on FAA Form 8020-15. The facts will categorize the case as critical, potential, or no hazard. In critical and potential situations, every effort should be employed to establish the aircraft's identity prior to closing the file.

(a) *Critical*: a situation in which collision avoidance was due to chance rather than a pilot's act. Less than 100 feet of aircraft separation is considered critical.

(b) *Potential*: a situation which would probably have resulted in a collision if no action had been taken by either pilot. Less than 500 feet of aircraft separation is usually required in this case.

(c) *No Hazard*: a situation in which direction and altitude would have made a midair collision improbable regardless of evasive actions.

(2) When altimeter error is suspected, a detailed report shall be made on all factors that may have had a bearing on the occurrence, i.e., altimeter type, indicated altitude, airspeed, free air temperature, correction factor, logbook review of altimetry complaints, etc. Consideration shall be given to company operating procedures. Necessary action shall be taken to have the altimeters, transponders, and static systems checked. The inspector shall also request flight recorder tapes for analysis, when appropriate.

(3) The investigation shall be coordinated with the Air Traffic facility(ies) involved. Their findings and recommendations shall be considered in the investigation.

**c.** The incident report number assigned sequentially by ATQA on FAA Form 8020-21 will be displayed in the upper right-hand corner of FAA Form 8020-15.

**d**. The investigating office shall print an original of completed FAA Form 8020-15 and distribute one copy each by mail within 90 days of the initial notification of the NMAC to:

(1) The regional Flight Standards division.

(2) The regional service area director.

(3) The responsible Air Traffic facility.

**e.** If the NMAC report needs to be reclassified, complete FAA Form 8020-19 via ATQA. If the NMAC report is reclassified as "insufficient evidence to investigate," an indicator will be retained. If the NMAC report is reclassified as "no incident," the related information will be removed from the FAA information system. Print an original of FAA Form 8020-19 and distribute one copy each as soon as possible by mail to the addresses in paragraph 7d.

## 8. Hazardous Air Traffic Reports (HATR) and Operational Hazard Reports (OHR).

**a.** For USAF HATR's and for U.S. Army OHR's, the appropriate FSDO will receive a complete copy of the incident package, i.e., FAA Form 8020-21, a copy of the HATR or OHR (if received by AT from the military), and any other attachments. Flight Standards will then conduct an investigation of the incident using FAA Form 8020-15, as described in paragraph 7 a, b, c, d, and e.

**b.** The investigating office shall distribute copies of the completed FAA Form 8020-15 and any attachments within 90 days of the initial notification of the HATR or OHR to:

(1) The regional Flight Standards division.

(2) The Air Traffic service area director.

(4) For HATR's:

(a) Air Force Inspection and Safety Center (AFISC)/SEFA, Norton AFB, California 92409-7001 (without attachments).

- (b) HQ AFCC/ATC, Scott AFB, Illinois 62225-6001 (without attachments).
- (c) The appropriate FAA regional Tech Ops representative (without attachments).
- (d) The originating USAF unit flying safety office (without attachments).
- (e) The appropriate MAJCOM's of facility or aircraft involved.
- (5) For OHR's:

(a) Commander, U.S. Army Safety Center, Attn: CSSC-DA (Accident Records Management Division), Fort Rucker, Alabama 36362-5363 (without attachments).

(b) The unit aviation safety officer whose address is in block 11 (point of contact for further information) of DA Form 2696-R (without attachments).

**c.** The investigating office shall keep the original of completed FAA Form 8020-15 and other related information in the facility files in accordance with paragraph 5, except that the package shall be labeled "Near Midair Collision Report (HATR)" or "Near Midair Collision Report (OHR)" as appropriate.

**9. Pilot Deviations.** All preliminary reports of pilot deviations, including reckless flying observed by Air Traffic, are to be completed by Air Traffic on FAA Form 8020-17 via ATQA and sent to the appropriate FSDO or CMO.

**a.** Investigation of reports of pilot deviations, including reckless flying, should be completed and recorded on FAA Form 8020-18 via ATQA within 90 days of the initial notification date.

**b.** The incident report number assigned sequentially by ATQA on FAA Form 8020-17 will be displayed in the upper right-hand corner of FAA Form 8020-18.

**c.** For reckless flying incidents reported to Air Traffic by the public or others but not observed by Air Traffic, a verbal report of the reported incident will be made to the FSDO or the caller will be asked to call the FSDO. For those such incidents and reckless flying incidents reported to the FSDO directly, the FSDO will then transmit information via the ATQA web application from *FAA Order* 8020-16 to the appropriate addressees by NADIN message via the Cornerstone Regional Operations Center and complete and file FAA Form 8020-17 via ATQA as specified in *paragraph 114h* with:

(1) The regional Flight Standards division.

(2) The Flight Standards District office responsible for the investigation.

**d.** The investigating office shall print an original of completed FAA Form 8020-18 and distribute one copy each of completed FAA Form 8020-18 with the attached FAA Form 8020-17 within 90 days of the initial notification of the pilot deviation to:

- (1) The regional Flight Standards division.
- (2) The Air Traffic service area director.
- (3) The responsible Air Traffic facility.

(a) If a pilot deviation report is to be reclassified, complete FAA Form 8020-19 via ATQA. If a pilot deviation report is reclassified as "an Operational Error or Deviation," a "Report Number Correction," "insufficient evidence to investigate" or "no incident," the related information will be added/removed from the FAA information system. Print an original of FAA Form 8020-19 and distribute one copy each as soon as possible by mail to the addresses in paragraph 9d.

(b) If a pilot deviation investigation is transferred to the Aviation Safety Action Program (ASAP) for processing, the FAA office having jurisdiction over the event coordinates with the certificate holding district as to which office will complete the pilot deviation report. See FAA Order 8900.1

**10. Vehicle and Pedestrian Deviations.** Preliminary reports of vehicle or pedestrian deviations are to be completed by Air Traffic on FAA Form 8020-24 via ATQA and sent to the appropriate regional Airports division or Flight standards office. For Air Traffic reporting instruction, *see FAA Order 8020-16.* The regional Airports divisions investigate vehicle or pedestrian deviations that occur at airports certificated under 14 CFR Part 139 with FAA and FAA contract towers.

**a.** Investigation of reports of vehicle or pedestrian deviations should be completed and recorded on FAA Form 8020-25 via ATQA within 90 days of the initial notification date (see Appendix 1). FAA Form 8020-25 will be completed even if the vehicle or pedestrian deviation resulted in an accident.

**b.** The incident report number assigned sequentially by ATQA on FAA Form 8020-24 will be displayed in the upper right-hand corner on FAA Form 8020-25.

**c.** The investigating office shall print an original of the completed FAA Form 8020-25 (see retention instructions in paragraph 5) and distribute one copy each of this completed form with the attached FAA Form 8020-24 within 90 days of the initial notification of the vehicle or pedestrian deviation to the:

- (1) Airport Safety and Operations Division, AAS-300
- (2) Regional Air Traffic service area director
- (3) Airport manager or designee

**d.** If a vehicle or pedestrian deviation report needs to be reclassified, complete FAA Form 8020-19 via ATQA (see Appendix 2). If a vehicle or pedestrian deviation report is reclassified as "insufficient evidence to investigate" or "no incident," the related information will be removed from the FAA information system. Print an original of FAA Form 8020-19 and distribute one copy each as soon as possible by mail to the addresses in paragraph 10c.

#### 11. Emergency Evacuations.

**a.** Emergency evacuations shall be reported on FAA Form 8020-11 by Air Traffic. The incident will be investigated by Flight Standards and a report prepared on FAA Form 8020-23. The investigating inspector should proceed to the scene of the evacuation as soon as possible to obtain the needed information. An emergency evacuation that results in a serious injury or a fatality shall be classified as an aircraft accident.

**b.** A copy of FAA Form 8020-23 should be forwarded to the Air Transportation Division, AFS-200, within 10 workdays of the occurrence. The narrative section of the report should include at least a brief narrative on the following:

(1) The reason for evacuation.

(2) Who initiated the evacuation (e.g., crewmember or passenger).

(3) Which exits (by specific location) were used, which exits were not used, and reason for nonuse.

(4) Whether any exits, slides, or associated components malfunctioned and, if so, what were the malfunctions.

(5) Whether any particular exit was used by the majority of the evacuees and, if so, the apparent reason.

- (6) The estimated total time it took to evacuate the aircraft.
- (7) The nature and extent of any injuries.

**12. Parachute Jumping**. If requested by the FSDO, Air Traffic will file FAA Form 8020-11 for a parachute-jumping incident for an aircraft that is under its control. For incidents involving an aircraft not under the control of Air Traffic, the information shall be forwarded to the appropriate FSDO. FAA Form 8020-23 shall be completed by Flight Standards when a serious injury or a fatality results from a voluntary parachute jump. The completed incident report shall contain the following in the narrative section:

- **a.** Name of jumper.
- **b.** Experience and training of jumper.
- **c.** Club affiliation.
- **d.** Description of the parachutes and their packing records.

**13.** Forcible Seizure of Aircraft (Hijack). Resolution of ongoing acts of aircraft piracy is the responsibility of the Department of Homeland Security (DHS). For prosecution purposes, the after-the-fact investigation of aircraft piracy, as well as of threats and/or acts of sabotage and other related criminal acts, are the responsibility of the Justice Department.. The FAA's fundamental interest in and responsibility for safety require that FAA report the incident and give appropriate assistance to the DHS. No FAA Form 8020-11 is filed by Air Traffic. However, if the incident involves other safety factors, e.g., emergency evacuation or interference with the flightcrew, Flight Standards divisions shall participate and submit FAA Form 8020-23. In such cases, close cooperation is necessary between DHS and Flight Standards divisions.

**14. Hazardous Materials**. The requirements for reporting incidents involving hazardous materials appear in 49 CFR 175.45.

**a.** When a FSDO receives notification from an operator that a hazardous materials incident occurred, the air carrier's representative or the aircraft operator should be advised to also contact the appropriate Servicing Security Element (SSE) concerning the incident. If circumstances prevent immediate contact between the reporting person and the SSE, the FSDO should obtain the following information and relay it to the appropriate SSE:

- (1) Name of the person reporting the incident.
- (2) Name and address of the carrier involved.
- (3) Telephone number where the reporting person can be contacted.
- (4) Date, time, and location of the incident.

(5) The extent of injuries, if any.

(6) Classification, proper name, and quantity of the hazardous materials involved and whether a continuing danger to health and/or life exists at the scene.

**b.** The FSDO should advise the operator to submit Form DOT F 5800.1, Hazardous Materials Incident Report, in accordance with 49 CFR 175.45(c).

**c.** Hazardous materials incidents meeting the reporting requirements of 49 CFR 175.45(a) require telephonic notification to the Cornerstone Regional Operations Center and the Washington Operations Center.

**d.** A report of an incident involving a disease factor may be made by telephone directly to the Director, Centers for Disease Control, U.S. Public Health Service, Atlanta, Georgia, (404) 633-5313.

#### 15. Sonic Boom Complaints.

**a.** Speculation on Sonic Booms. FAA personnel shall not indulge in prolonged time expenditure or speculation with complaints concerning aspects of responsibility for disturbances or property damage. Do not imply that sonic booms or similar disturbances are caused by specific aircraft or aircraft operated by a particular military or civilian organization.

**b.** Investigation of Complaints. The Department of Defense is responsible for investigating all sonic boom complaints. FAA personnel shall assist the investigating officer whenever an official request is made.

**c.** Written Complaints.

(1) When a complaint is received on alleged damage from a sonic boom, answer the complaint in writing, using the following format:

(Name and address of complainant)

Dear (Name):

This is in reply to your letter of (date) regarding damage to your property which you believe was caused by the sonic boom of an aircraft operating in your vicinity. Since the Department of Defense investigates all sonic boom reports, we have forwarded your letter to the U.S. (Air Force or Navy). Their answer will be mailed to you directly which should expedite the handling of your inquiry and provide for a prompter and more responsive reply.

Sincerely,

(Name and Title)

(2) Forward a copy of the complaint letter and the FAA's reply to one of the following, as appropriate:

(a) Claims Officer, Office of the Staff Judge Advocate (nearest USAF installation).

(b) Commandant (appropriate Naval District), Attention: District Legal Officer.

(3) When a written complaint is received which does not claim property damage, the complaint should be answered in writing, using the format in paragraph 14c(1), except the first sentence should be changed to read "...regarding what appears to be a sonic boom caused by an aircraft operating in your vicinity." Forward a copy of the complaint letter and FAA's reply to the organization concerned.

**d.** Telephone Complaints. Handle telephone complaints or reports received by any FAA element by tactfully referring the complaint to the nearest military air installation. If local coordination arrangements are in place, calls should be referred to the designated military officer.

**16.** Complaints of Noise or Damage Allegedly Caused by Civil Aircraft. When Flight Standards receives a telephone complaint of noise or damage allegedly caused by civil aircraft, the complaint should be handled tactfully. If unable to satisfy the complainant, the matter should be referred to the appropriate Flight Standards regional office. Written complaints of noise or damage allegedly caused by civil aircraft shall be coordinated with the appropriate Flight Standards regional office.

**17.** Unidentified Flying Object (UFO). When Flight Standards receives a report of a UFO, and if concern is expressed that life or property might be endangered, refer the individual to the local police department.

# Chapter 5. Incident Investigation and Reporting Section 3. Criminal Incidents

**18. Statutory Provisions**. 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. Appendix. The significant U.S.C. sections which could involve an incident within the purview of this order are:

- a. 18 U.S.C. 32, Destruction of Aircraft or Aircraft Facilities.
- b. 18 U.S.C. 1361, Government Property or Contracts.
- c. 18 U.S.C. 1362, Communication Lines, Station, or System.
- d. 18 U.S.C. 1364, Interference with Foreign Commerce by Violence.
- e. 18 U.S.C. 2117, Breaking or Entering Carrier Facilities.
- f. 49 U.S.C. Appendix 1472(c), Interference with Air Navigation.
- g. 49 U.S.C. Appendix 1472(i), Aircraft Piracy.
- h. 49 U.S.C. Appendix 1472(j), Interference with Flight Crewmembers or Flight Attendants.
- i. 49 U.S.C. Appendix 1472(k), Certain Crimes Aboard Aircraft in Flight.
- j. 49 U.S.C. Appendix 1472(1), Carrying Weapons or Explosives Aboard Aircraft.
- k. 49 U.S.C. Appendix 1472(m), False Information.
- l. 49 U.S.C. Appendix 1472(o), Interference with Aircraft Accident Investigation.

**19. Handling of Possible 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 (also see the Criminal Investigations chapter in the latest edition of Order 2150.3, Compliance and Enforcement Program and FAA Order 1600.38, Employee and Other Internal Security Investigations):

**a.** Generally any FAA employee receiving information on criminal acts involving aircraft should report the information to the nearest SSE manager who will in turn notify the FBI or appropriate Federal, State, or local law enforcement agency in accordance with FAA Order 1600.38. In an emergency, this notification should be made through the Cornerstone Regional Operations Center. 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, such as flight cancellation, immediate landing, or inspection of baggage, facilities, and aircraft.

**b.** In instances of a criminal act, discovery of an explosive or incendiary device aboard an aircraft, an attempt at a criminal act, or receipt of warning of a criminal act, the air carrier, aircraft owner, or operator is expected to notify FAA and the FBI. FAA personnel, after receipt of information on such an incident, shall immediately notify their supporting security element who in turn will notify the FBI, regardless of whether or not this was done by non-FAA personnel.

**c.** FAA personnel should exercise the utmost discretion in carrying out their responsibilities to avoid unfavorable public reaction. Therefore, any information received should be discussed only with the individuals or organizations involved and with law enforcement agencies. When a criminal act has occurred or an explosive or incendiary device is discovered aboard an aircraft, inspectors shall not release such information to the news media. Any information released to the news media should come only from the individuals or organizations involved or the FBI.

# Chapter 5. Incident Investigation and Reporting Section 4. FAA Form 8020-23, Aircraft Accident/Incident Report

**20. General.** FAA Form 8020-23 shall be prepared for each aircraft incident except for NMAC's and pilot deviations. For NMAC's, complete FAA Form 8020-15 via ATQA. For pilot deviations, complete FAA Form 8020-18 via ATQA. Examples of incidents to be reported on FAA Form 8020-23 include: emergency evacuations, foreign aircraft accidents and incidents in the United States, and select parachute-jumping incidents. Complete Form 8020-24 via ATQA for vehicle or pedestrian deviations. Other incidents reported on FAA Form 8020-23 include those incidents that an operator is required to report to NTSB in compliance with 49 CFR 830.5. In cases of hijack incidents, FAA Form 8020-23 will be completed by Flight Standards, but there will be no related FAA Form 8020-11. In cases of reckless flying incidents not observed by Air Traffic, Flight Standards will complete FAA Forms 8020-17 and 8020-18 via ATQA.

**21. Preparation of FAA Form 8020-23 (For Incidents).** Sections of FAA Form 8020-23 for which information is obtainable and pertinent must be completed. FAA safety analysis require that the form be carefully prepared and include all relevant facts. Use an "X" to indicate selections for a "yes" or "no" condition or when multiple selections are shown. Section 33, Narrative, shall contain an incident summary to provide continuity to the information given in the data sections or attachments. The section on "Conduct of Investigation" is not required for incidents. However, the prudent investigator will complete this section.

# 22. Distribution of FAA Form 8020-23 (For Incidents).

**a.** Basic Distribution. The original is sent to AFS-620 and a copy to the regional Flight Standards division of the reporting district office.

- **b.** Additional Distribution. For incidents involving:
  - (1) Holders of an operating certificate: copy to the operator's certificate-holding district office.
  - (2) An ATC facility: copies to the regional service area director and the facility involved.
  - (3) Emergency evacuations: copy to AFS-200 within 10-workdays of the occurrence.

# Chapter 6. Military Accident or Incident Investigations

#### 1. FAA Participation.

**a.** Title 49 United States Code provides for the agency's participation in military accident investigations when an FAA function is involved.

**b.** The military commander-in-charge of the investigation is responsible for making a determination on FAA involvement and will include this determination in the FAA notification. Despite an initial negative determination, the senior member of an aircraft safety investigation board or the director of a military safety center may later make a determination on FAA involvement and advise FAA.

**c.** An FAA function will be considered to be involved when an FAA employee or designee; an FAA facility, procedure, directive, or publication; an FAA-certificated civilian airman; or an FAA-certificated joint use airport possibly is associated with an accident or incident (termed "mishap" by the military services). FAA may have an interest when the aircraft or equipment is common to both civil and military aviation or when there are environmental factors of common interest.

**d.** In a military mishap in which a mutual interest exists but no FAA function is or may be involved, FAA may request to participate in the investigation. Requests for participation shall be forwarded to the appropriate military safety center following coordination with AAI-100 (see Appendix 1 for military addresses and format of request).

**e.** Reported accidents or incidents involving military aircraft shall be investigated by the FSDO responsible for the geographic area in which the incident occurred whenever:

(1) Public safety is involved.

(2) There are possible 14 CFR violations

**f.** The investigation and reporting of military aircraft accidents or incidents shall follow the same guidelines as for civil aircraft incident investigations.

**2. Types of Investigations.** Each military service has the responsibility to investigate aircraft mishaps involving aircraft assigned to that service. The investigation will be conducted by an aircraft safety investigation board ("safety board") on which only military personnel may be members. Civilians, including FAA personnel, may be panel or working group members.

**a.** The primary missions of the investigations conducted by an aircraft military safety board are to:

(1) Determine, analyze, and evaluate all factors which contributed to, or may have contributed to, the mishap.

(2) Recommend actions that will prevent recurrence.

**b.** Other investigations associated with a military mishap may be conducted for reasons other than accident prevention by safety boards appointed for that specific purpose. Normally, FAA personnel do not participate in other investigations. However, when FAA participation is required,

the personnel will have an opportunity to observe the proceedings. FAA participants may suggest lines of inquiry to the safety board but may not question witnesses.

# 3. Investigation Arrangements.

**a.** After receiving notification from the military authorities of an aircraft mishap that involves FAA functions, FAA will indicate if it desires to participate in the investigation by sending a response (as shown in Appendix 1).

**b.** The appropriate FAA office may give an oral summary of the response to the military commander responsible for the mishap investigation. However, the FAA office involved will also send a message containing the response as soon as possible, normally within 24 hours of the receipt of the notification from the military.

# 4. Security Classification and Clearance.

**a.** Security matters will be administered in accordance with applicable military regulations. However, all classified information should be handled and processed in accordance with the latest edition of Order 1600.2, Safeguarding Controls and Procedures for Classified National Security Information and Sensitive Unclassified Information. The regional Security and Hazardous Materials Division should be contacted on security issues and requirements.

**b.** The commander of the unit of a military aircraft involved in a mishap and the commander responsible for the mishap investigation are responsible for the security of classified matters and material from the aircraft involved in the mishap.

**c.** Official notification of military authorities about employee security clearances shall be made by the appropriate regional Security and Hazardous Materials Division. Presentation of FAA credentials does not convey any information about an employee's security clearance.

**5.** Assignment of FAA Personnel. An FAA IIC shall be assigned whenever FAA participates in a military aircraft mishap investigation. Appropriately qualified personnel shall be assigned when FAA participates in such an investigation.

# 6. Participation of FAA Personnel.

**a.** FAA personnel will participate in a military aircraft mishap investigation to promote safety in the NAS and to prevent recurrence of the factors which led to the mishap. FAA personnel participating in the investigation will not participate in any other type of military investigation of the occurrence. FAA participants will not have enforcement or punitive responsibilities with respect to any military person involved in the mishap.

**b.** The FAA IIC and FAA participants shall be active participants in the accident investigation. However, the FAA IIC and FAA participants shall not participate in the determination of probable cause by the safety board nor participate in the safety board findings or recommendations. Whenever an FAA function is identified as an aircraft accident casual factor, the senior member of the board will afford the FAA IIC an opportunity to submit views with respect to the board's findings. Such views shall be appended to the mishap report. **c.** The FAA IIC shall:

(1) Determine the extent of involvement of FAA responsibilities and the extent of participation in the investigation.

(2) Effect liaison between FAA and military authorities.

(3) Arrange to provide all pertinent information available from the appropriate FAA office/facility to the military authorities.

(4) Ensure that all FAA personnel participating in the investigation understand the privileged nature of the investigation.

(5) Make necessary provisions to arrange for FAA personnel as witnesses.

**d.** FAA personnel shall be allowed to:

(1) Participate as members of panels or working groups.

(2) Interview the pilots, crewmembers, passengers, and witnesses.

(3) Examine the wreckage, accident scene, and any other material evidence if the personnel possess the proper security clearance.

**e.** The director of the involved military safety center will prepare the brief of the aircraft accident for FAA. The brief should be forwarded directly to the Accident Investigation Division, AAI-100, 800 Independence Avenue, SW., Washington, D.C. 20591.

**f.** Copies of all nonprivileged documents used by the safety board shall be provided to the FAA accident coordinator. The documents will exclude all testimonial evidence, safety board findings, causes, and recommendations made in the investigation report.

**7. Treatment of Testimony.** The testimony of witnesses and any other information obtained by FAA participants in a military mishap investigation will:

**a.** Be considered and treated by FAA as confidential to the same extent and in the same manner as the military service conducting the investigation.

**b.** Not be released outside FAA.

c. Not be used for FAA enforcement actions.

The military authorities will afford an FAA witness the same protection as a military witness with respect to testimony before a safety board.

**8.** Military Assistance in FAA Investigations of Military Aircraft Mishaps. The FAA may conduct a separate, independent investigation of a military aircraft mishap to carry out FAA

responsibilities. The military service involved will assist FAA personnel by making material evidence and military witnesses available. Arrangements to conduct the FAA investigation will be coordinated between the military service headquarters and FAA. When military personnel or civilian employees of a military service will testify before an FAA investigator, the military commander will provide legal assistance to the individual.

**9. Responsibilities of the Director of a Military Safety Center.** The director of a military safety center shall provide FAA with any information which, in the director's judgment, would contribute to the promotion of air safety.

**10. FAA Requests for Military Aircraft Mishap Information**. FAA may request information on military aircraft mishaps. Such requests may be addressed either to the director of a military safety center or to the military service headquarters.

**11.** Suspected Sabotage or Other Criminal Acts. Whenever any person becomes aware of information which indicates sabotage or other criminal act as a possible mishap causal factor, the information shall be brought immediately to the attention of the senior member of the safety board.

# **Chapter 7. Foreign Accidents or Incidents**

1. Responsibility for International Areas. FAA responsibilities remain unchanged when U.S.registered or -manufactured aircraft are involved in an accident or incident in a foreign country. The degree of investigation participation, however, is subject to ICAO Annex 13, Department of State policy, and any special agreements between the United States and a particular country. However, accidents and incidents investigated in foreign countries are the jurisdiction of the country in which they occurred, and investigations will be conducted according to the country's procedures. The NTSB is, by law, the agency which provides U.S.-accredited representatives ("U.S. representatives") for accidents. FAA personnel will participate in investigations as technical advisors to the U.S. representative. If no NTSB representative participates in the investigation, an FAA representative may be designated as the U.S. representative. The appropriate division manager will assign regional personnel based on NTSB and AAI-100 requirements to:

**a.** Participate in investigations of all accidents or incidents that occur in foreign countries only after coordination with the U.S. embassy or the Department of State and AAI-100. AAI-100 will coordinate FAA participation with NTSB.

**b.** Participate in investigations of accidents or incidents that involve U.S.-registered or manufactured aircraft in foreign countries if requested by the foreign government and if approval is granted by the Department of State and NTSB.

**c.** Participate in investigations of accidents or incidents that involve a foreign country's civil aircraft when invited by that country and/or requested by AAI-100. Participation shall be limited to obtaining factual data and providing technical advice. FAA personnel shall not participate in the probable cause deliberations or determination. No notes, reports, film, photographs, or documents relating to the accident or incident will be retained by FAA personnel. Such documents will be left in the country of occurrence.

**d.** Offer technical assistance and guidance in the investigation of accidents and incidents involving U.S. aircraft to countries with which the United States has no investigative agreements. This offer will be made through the Department of State or U.S. embassy.

**e.** Conduct a review of the aircraft accident notification procedures in Foreign Affairs Manual Volumes 7 and 10 during routine visits with American embassies and consulates within the region's area of responsibility. Any deficiencies should be reported via the FAA regional office to the Office of International Aviation for coordination of corrective actions with the Department of State.

2. Invitation or Request for U.S. Participation in Foreign Investigations. If an ICAO member state invites the participation of the United States in an investigation, the invitation must be sent to the Department of State. If a contracting state does not request such participation, but FAA wishes to participate, a request shall be made to the ICAO member state by the Department of State. Washington, D.C., level coordination with the Department of State and NTSB shall be accomplished by AAI-100. The degree of FAA interest in the accident or incident, local diplomatic considerations, availability of qualified FAA personnel, etc., should be made known to the Manager, AAI-100, during or shortly after initial notification of the occurrence.

**a.** The NTSB usually discharges the U.S. responsibilities to ICAO. When the FAA participates with NTSB, the FAA assignee(s) will be the FAA advisor(s). If more than one FAA employee is assigned as an advisor, one employee will be designated as the primary FAA advisor.

**b.** The NTSB may request FAA to discharge the U.S. responsibilities to ICAO. The NTSB will make the necessary requests and arrangements through the Department of State with the foreign country when FAA agrees to perform this function. In such cases, an FAA employee will be assigned as the U.S. representative.

**c.** AAI-100 will notify the FAA region concerned when the FAA U.S. representative or advisor is approved and cleared to depart to the accident or incident scene.

#### 3. Foreign Investigation Assignments.

**a.** When an FAA employee is assigned as the U.S. representative, all activities will be conducted in accordance with NTSB direction and ICAO Annex 13.

**b.** FAA advisers are expected to support the U.S. representative fully and are under the direct supervision of the U.S. representative. FAA advisers shall submit reports as requested by the U.S. representative. An FAA adviser shall withdraw from an investigation when directed by the U.S. representative. An adviser may direct a request to withdraw to the U.S. representative only after approval by the adviser's supervisor and AAI-100.

**c.** The FAA U.S. representative, or the primary FAA adviser, shall keep AAI-100 informed of the status of the investigation. When information may only be transmitted by the U.S. representative through the Department of State to NTSB, AAI-100 will contact NTSB to obtain such information.

**4. Reports on Foreign Investigations**. Accidents and incidents that involve U.S.-registered or - manufactured aircraft in foreign countries are expected to be investigated and reported upon by the country of occurrence. When that country is an ICAO member, the country is expected to furnish the U.S. with a copy of the report whether or not the U.S. participated in the investigation. The country of occurrence should be advised, however, that no written information should be released to FAA until that country agrees that the information may be released to the public. The FAA could be subpoenaed to produce the information before the completion of the investigation. Foreign reports will be handled as follows:

**a. Progress Reports**. Progress reports during the investigation's field phase will be provided daily, if possible, to AAI-100 by the U.S. representative (if FAA) or the FAA advisor. Whenever an aircraft's airworthiness is involved, the appropriate Aircraft Certification Directorate shall be informed of the investigation's progress through AAI-100. For accidents or incidents involving aircraft operated by 14 CFR 121, 125, 133, or 135 certificate holders, the operator's certificate-holding district office will also be kept informed of the investigation by AAI-100.

**b.** Final Reports. Accident reports prepared by (or for) the country of occurrence are received by FAA from various sources. The final report may be distributed by that country directly to the U.S. representative, the FAA advisor, to an International Field Office, or in some instances, a U.S. embassy. Copies of foreign accident reports shall be forwarded to AAI-100 for redistribution. The

FAA needs the final report to distribute copies to the appropriate Aircraft Certification Directorate and the Aviation Data Systems Branch, AFS-620. The Flight Standards district office receiving the report will complete a 8020-23.

**5.** Foreign Civil Aircraft Accidents or Incidents in the United States. FAA investigative responsibilities for a U.S. civil aircraft described in Chapter 1 remain unchanged when a foreign civil aircraft is involved in an accident or incident in the United States. FAA Form 8020-23 must also be submitted.

**6.** Corrective Actions. The provisions of Chapter 1, paragraph 16, FAA Safety Recommendation Program, apply to foreign accident and incident investigations.

# Chapter 8. National Transportation Safety Board (NTSB) Accident and Incident Hearings and Depositions

**1.** General. The rules governing NTSB accident hearings and depositions (testimony under oath) appear in Title 49 CFR 845 (see Appendix 3).

**2. Hearing and Deposition Scheduling.** When notified that depositions are to be taken or that an NTSB accident investigation public hearing is to be held, AAI-100 will contact the assigned hearing officer to determine NTSB's requirement for FAA witnesses. Immediately thereafter, AAI-100 will contact the FAA IIC and the Office of the Chief Counsel - Assistant Chief Counsel, Litigation & General Legal Services Division, AGC-400, for the purpose of coordinating FAA's efforts in preparing for the hearing or deposition.

# **3.** FAA Spokesperson(s).

**a.** The FAA spokesperson(s) for the prehearing conference and for the formal hearing will be designated by AAI-100.

**b.** The FAA spokesperson represents and speaks for the FAA. The FAA spokesperson should develop a comprehensive line of questions. The spokesperson will be permitted to question FAA and non-FAA witnesses.

**c.** The Litigation & General Legal Services Division, AGC-400, is responsible for providing legal counsel and procedural briefings to FAA personnel who are designated as hearing witnesses.

## 4. FAA Representation at Prehearing Conferences and Hearings.

**a.** FAA representatives at the prehearing conference and the hearing will be the FAA spokesperson, the FAA IIC, an AAI-100 representative, an AGC-400 representative, and those FAA technical specialists designated by the spokesperson with the advice of the appropriate FAA elements. The number of FAA representatives should be minimized and limited to personnel whose advice and assistance are essential for the proper representation of FAA.

**b.** Witnesses do not normally attend prehearing conferences. However, if attendance is required, FAA employee witnesses shall be accompanied by one or more of the following:

- (1) The FAA IIC.
- (2) The employee's supervisor.
- (3) A legal representative from AGC-400, if the witness requests.
- (4) A representative for the Air Traffic Organization.

**5. 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.

**6. FAA Employees as Witnesses at NTSB Hearings and Depositions.** FAA employees will confer with the FAA spokesperson, legal representatives, and other personnel as deemed necessary by the FAA spokesperson, prior to testifying at an accident or incident hearing deposition. Each FAA witness 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. The FAA spokesperson will review any documentary evidence to be introduced by an FAA employee. Suggested guidelines for the conduct of FAA witnesses follow.

**a.** Prepare a brief oral statement outlining your qualifications, duties, and capacity of employment with FAA including:

- (1) Full name.
- (2) Business address.
- (3) Date employed by FAA.
- (4) Major duties.
- (5) Years of aviation experience.
- (6) Type of aviation experience.
- (7) FAA certificates held.
- (8) Additional qualifications.
- **b.** Relax. Take your time on the witness stand.

**c.** Ascertain that the question is complete before answering. Do not anticipate portions of the question.

- d. Be sure you fully understand the question before answering.
- e. Ask for a rereading or rephrasing if the question is not understood.
- f. Answer all questions directly and concisely.
- g. Confine your answers specifically to the questions asked.
- **h.** Be brief. Do not volunteer information.

i. Answer questions with a "yes" or "no" when possible without elaboration.

**j.** Answer questions with which you are not directly familiar by stating that you have no knowledge regarding the question.

k. Do not offer conjecture or give your personal opinion.

**I.** Do not guess. State that you do not know the answer when you do not know it.

**m.** Advise the FAA spokesperson privately and as soon as possible when you have additional information on a matter covered by specific questions.

**n.** Consult the applicable source material in advance if you anticipate questions on 14 CFR, operation specifications, FAA directives, an air carrier's manual, instrument approach procedures, etc. Have material available for reference and quotation, if necessary.

**7.** Exhibits and Transcripts. The NTSB will provide AAI-100 with a set of exhibits before NTSB hearings and after NTSB depositions (the latter for a fee).

# Chapter 9. Public Release of Accident and Incident Information

## 1. General.

**a.** Public disclosure of FAA records under the Freedom of Information Act (FOIA) is addressed in paragraph 8.

**b.** Release of accident and incident information to the news media is the responsibility of the organization (FAA, NTSB, or military service) conducting the investigation. For FAA, the Office of Communications at headquarters, and regional media relations staff provide a control point to answer and coordinate information requests from the news media and the public.

**c.** Regardless of which organization conducts the investigation, FAA shall not release any accident or incident information that would or could reasonably be expected to interfere with the investigation efforts. Coordination with the investigating organization's IIC on the release of information is essential.

**d.** The above information release guidelines are not intended to restrict the free exchange of factual information between individuals, organizations such as product manufacturers (airframe, engines, etc.), or industry organizations that are part of the investigating team.

## 2. NTSB-Conducted Investigations.

**a.** The FAA will not respond to information requests related to accidents or incidents under NTSB investigation unless the request pertains only to factual information on FAA activities or operations and is information which is otherwise releasable under the FOIA. FOIA requests shall be handled in accordance with paragraph 8.

**b.** Requests for information that FAA obtained during an investigation by FAA personnel as participants in an NTSB-conducted investigation (e.g., the content of witness statements, photographs, reports of factual observations, readings of instruments, or recordings) that do not constitute information on FAA activities or operations will be referred to NTSB. FOIA requests shall be handled in accordance with paragraph 8.

**c.** Requests for information related to NTSB activities, investigations, etc., will be referred to NTSB's Office of Public and Office of Transportation Disaster Assistance, any NTSB field office, or to NTSB's IIC. FOIA requests shall be handled in accordance with paragraph 8.

**3. Military Aircraft Information.** Information on military aircraft or personnel involved in an accident or incident shall not be released by FAA. Requests for such information shall be referred to the commander of the appropriate military aviation facility nearest to the accident or incident scene or to the Public Affairs Office of the appropriate military service.

## 4. Information That May Be Released By FAA.

**a.** Certain preliminary facts pertaining to an accident or incident may be released by FAA as soon as the facts are known. When the release is made by other than an FAA employee assigned to

an FAA Communications office, the contents of the release shall be brought to the attention of the regional Communications office as soon as possible.

**b.** All or any part of the following factual information may be released by the FAA IIC or by the applicable facility, center, or regional office as soon as the information is available:

(1) Identification information such as aircraft make, model, and registration number.

(2) Nature of the flight, i.e., general aviation or air carrier.

(3) History of the flight, e.g., flight plan, route of flight, destination.

(4) Pilot's aeronautical qualifications, i.e., type of airman certificate and ratings, certificate status, and limitations, if any.

(5) Aircraft's operational status (e.g., status and contents of airworthiness certificate, including approved operating limitations) and any factual data on the aircraft airworthiness or whether a certificate of waiver or special flight permit was issued and, if so, the limitations.

(6) Contents of pertinent recorded weather observations.

**c.** Release of accident and incident information to members and staff of the United States Senate and United States 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 release to the Congress.

#### 5. FAA Office of Communications Releases During Investigations.

**a.** Requests for information by the media about FAA activities or operations associated with the investigation such as copies of ATC controller statements, recordings or transcripts of AT communications, or information on the technical performance of FAA facilities, shall be directed to the headquarters Office of Communications. All public inquiries should go to the FOIA office.

**b.** Regional 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.

(2) The FAA IIC when an investigation is conducted by FAA.

**c.** Investigation information shall not be released prematurely, e.g., information on the functioning of navigational aids before a flight check is completed. All such information shall be reviewed by the appropriate regional division manager or higher authority to ensure the completeness or accuracy of such information.

**d.** Official statements of known facts about the accident or incident made by personnel involved in controlling or communicating with the flight may be released only after review by the appropriate legal office to ensure that statements are entirely factual.

e. Requests for information concerning FAA's plan and schedules for new facilities and procedures, preventive measures, and related material, including reasons why certain facilities have not been installed shall be referred to the Washington headquarters Office of Communications.

**f.** For an accident or incident in the vicinity of the Mike Monroney Aeronautical Center or the FAA Technical Center, the Office of Communications will assume the role normally assumed by the regional media relations staff. After the release of the factual information in paragraph 4, however, the center media relations staff will coordinate all additional accident information activities with the appropriate regional media relations staff. Information release policy and authority will remain with the responsible regional media relations staff. A member of the center media relations staff will serve primarily as the local spokesperson.

## 6. Air Traffic Recordings and Transcripts.

**a.** After completion of the field phase of an aircraft accident/incident investigation (except military accidents), transcripts and recorded copies of AT radio transmissions and other communications shall be considered identifiable records of the FAA and may be released to the public upon payment of the appropriate fee as described in the latest edition of FAA Order 1200.23. For the purpose of the above provision, an NTSB field accident investigation will be considered complete when all NTSB personnel leave the scene. However, recording and transcript copies will not be released until the NTSB IIC officially returns custody of such items to the FAA facility.

**b.** When ATC communication recording or transcripts are approved for release, the regional Communications office, after coordination with the regional AT division manager, FAA General Counsel, and the Washington headquarters Office of Communications, shall arrange to playback pertinent portions of the recorded communications with the assistance of the AT accident representative. Permission to hear a playback of recorded radio communications includes permission for those listening to make their own recording. The playback will not occur unless:

- (1) It is under the direct supervision of the communications officer or the officer's designee.
- (2) A copy of the original recording is used.
- (3) The official transcript is completed.
- (4) It is made simultaneously with the transcript release.

**c.** Public disclosure of portions, entire transcripts, or recordings of AT radio communications may be withheld when it is determined by the appropriate authority that the denial is consistent with the purpose of one or more of the exemptions permitted under 5 U.S.C. 552(b). The exemptions are described in the latest edition of Order 1200.23.

**d.** National Airspace System computer/radar data release is governed by the latest edition of Order 1200.22, Use of National Airspace (NAS) Computer/Radar Data or Equipment by Outside Interests.

#### 7. Public Request for Reports.

**a.** Aircraft Accident Reports. The agency is not authorized to release to the public copies of NTSB aircraft accident or incident reports and/or files maintained by FAA except as noted below. The requester should be informed that aircraft accident reports can be obtained from the National Transportation Safety Board, Records Management Division, 490 L'Enfant Plaza, SW Washington, DC 20594.

**b.** FAA Form 8020-11, Incident Report; and FAA Form 8020-23, FAA Accident/Incident Report. Requests for copies of FAA Form 8020-11 (the preliminary form) must be sent to the facility where the incident occurred. Public request for reports of incident investigations conducted by FAA (FAA Form 8020-23) will be referred to the Aviation Data Systems Branch, AFS-620, Federal Aviation Administration, Mike Monroney Aeronautical Center, P.O. Box 25082, Oklahoma City, Oklahoma 73125. A nominal fee is charged for search and reproduction. Requests for reports of incident investigations conducted by NTSB shall be addressed as in paragraph 7a.

**c.** FAA Form 8020-21, Preliminary Near Midair Collision Report; and FAA Form 8020-15, Investigation of Near Midair Collision Report. Copies of NMAC reports are maintained by the Air Traffic Information Technology Office, Technical Services Group. Requests for copies should be addressed to that office at 800 Independence Avenue, SW., Washington, DC 20591.

**d.** FAA Form 8020-17, Preliminary Pilot Deviation Report; and FAA Form 8020-18, Investigation of Pilot Deviation Report. Copies of pilot deviation reports are maintained by the Acquisition and Business Services, Information Technology, Technical Services office. Requests for copies shall be addressed as in paragraph 7c.

**e.** FAA Form 8020-24, Preliminary Vehicle or Pedestrian Deviation Report; and FAA Form 8020-25, Investigation of Vehicle or Pedestrian Deviation Report. Copies of vehicle and pedestrian deviation reports are maintained by the Air Traffic Information Technology Office, Technical Services Group. Requests for copies shall be addressed as in paragraph 7c.

**f.** FAA Form 8020-9, Aircraft Accident/Incident Preliminary Notice. Requests for dissemination must be coordinated with and approved by AAI-100.

## 8. FOIA Request for Accident or Incident Investigation Documents.

**a.** This section applies to FOIA (5 U.S.C. 552) requests for records that were created or obtained during investigations by FAA personnel as participants in NTSB-conducted investigations (referred to as major accident investigations) and during on-site investigations by FAA personnel.

**b.** Documents that were created by or originated with the FAA as part of the investigation, and are responsive to the request, must be gathered and reviewed for releasability. The release determination must be made in accordance with the FOIA exemptions set forth in 5 U.S.C. 552(b).

**c.** Prior to the release of any records regarding aircraft accidents or incidents under FOIA, coordinate with the FAA IIC.

Responsive documents that were created by or originated with NTSB are to be specifically sent to NTSB for a release determination. Referral of NTSB documents should be accomplished by sending a copy of both the incoming request and the responsive documents to NTSB with a request that

NTSB make a release determination and provide the FAA with a copy of their response to the requestor. The referral should be directed to the FOIA Officer, Records Management Division, National Transportation Safety Board, 490 L'Enfant Plaza East, SW., Washington, DC 20594.

# Chapter 10. Accident Investigation Bloodborne Pathogens Exposure Control Program

1. General. The FAA's Accident Investigation Bloodborne Pathogens Exposure Control Program was established on September 6, 1994, to provide guidance to FAA personnel on how to control potential exposure to bloodborne pathogens while conducting an on-scene aviation accident/incident investigation or examining accident wreckage specimens. These guidelines are applicable when human remains or body fluids are present at the accident site. The basis for the precautions is the presumption of the presence of bloodborne pathogens, such as the hepatitis B virus (HBV) and the human immunodeficiency virus (HIV), in blood or body fluids at the accident site. FAA Order 3900.19, Occupational Safety and Health Program, requires a means for addressing occupational safety and health issues. One element of occupational safety and health is the safety of FAA personnel assigned responsibilities for on-scene accident investigation or examination of wreckage specimens. The potential for exposure to bloodborne pathogens is of particular concern, and the potential for exposure needs to be minimized or controlled. The Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standard (29 CFR 1910.1030) provides requirements and guidance on controlling exposure to bloodborne pathogens.

## 2. Background.

**a.** Employees from various organizations within the FAA may be required as part of their job responsibilities to participate in the on-scene investigation of an aviation accident or to examine wreckage specimens. When conducting an investigation and preparing to exit the accident site, the FAA employee may be exposed to bloodborne pathogens. In order to control exposure to bloodborne pathogens, FAA organizations whose employees participate in these types of activities must meet OSHA requirements and have in place an Exposure Control Plan as provided in Figure 10-1, Exposure Control Plan. There are a number of considerations that should be applied in the development of an Exposure Control Plan: special training for the investigation participants; HBV vaccination; special assessment of the accident site for the presence of bloodborne pathogens (biohazard); selection process for determining what personal protective equipment should be used; qualification of the accident site as a biohazard for the protection of spectators, media, and industry personnel; biohazard waste disposal; and procedures for handling an exposure incident.

**b.** The FAA organizations most likely to have on-scene accident investigation responsibilities are: Office of Accident Investigation, Office of Aerospace Medicine, Aircraft Certification Service, Aircraft Certification Directorates, Flight Standards regional and district offices, Assistant Administrator for Security and Hazardous Material, Office of Airport Safety and Standards, and the Fire Safety Section, AAR-422, (located at the William J. Hughes Technical Center). The Office of Accident Investigation and FSDO's have Exposure Control Plans in place. Other FAA offices that have accident investigation responsibilities will utilize the Exposure Control Plan of these two offices when participating in an on-scene accident investigation.

## 3. Training.

**a.** A training program was developed by Flight Standards Service that satisfies the OSHA bloodborne pathogens awareness and protection training requirements. Training videos were developed which contain information and direction concerning bloodborne pathogens, the universal precautions that should be applied, and the procedures to be followed to control exposure. These

videos, supported by instructors and other training material, comprise the training program that describes procedures for the administration of the HBV vaccine and for on-scene participation in accident investigations where there may be an injury or fatality.

**b.** A full complement of training videos is available to each FAA office where FAA personnel may participate in on-scene accident investigations. All of these offices must have access to subject matter experts who will be available to respond to any need for further information. The training contains information and direction concerning bloodborne pathogens, the universal precautions that should be applied, and the procedures to be followed to control exposure. All affected FAA field offices should contact their nearest FSDO to arrange for training. Headquarters personnel training will be arranged by AAI. Appropriate personnel will receive initial training and then be given recurrent training on a yearly basis. Training costs will be absorbed by the participating offices.

**c.** Personnel designated to conduct the training must be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the work environment that the training will address.

#### 4. HBV Vaccination.

**a.** For those employees who have occupational exposure, an HBV vaccine series is available to minimize an employee contracting the virus. The HBV vaccine series is offered free of charge. Vaccination costs will be absorbed by the participating offices. Employees are required to contact their local healthcare professional (personal physician, hospital, public health office, as directed by the regional medical office and promptly initiate the series of vaccinations. Vaccination for HBV consists of a series of three injections. After initiation of the HBV vaccine with the first injection, a second injection is given 1 month later and is then followed by the third injection 6 months later. If the schedule is interrupted i.e., the intervals are exceeded, continue with the schedule.

**b.** A reimbursement process is required for compensating the employee for the cost of the vaccinations and related employee incurred expense or for the direct compensation to the healthcare professional for administering the HBV vaccine series. Confirmation from a healthcare professional that an injection has been administered is required to authorize reimbursement. Managers may authorize reimbursement for the entire vaccination series following demonstration that an employee has paid for the entire vaccination series and has received at least the first injection. Managers may also authorize reimbursement on an injection-by-injection basis after receiving a confirmation from a healthcare professional that each injection has been administered. A healthcare professional's signature on the Hepatitis B Virus (HBV) Vaccination Consent/Decline Form (FAA Form 8020-22), Figure 10-3, and a copy of a receipt of payment are sufficient to claim reimbursement after each injection. Prior to receiving the vaccinations, employees may apply for and receive an advance of funds in accordance with local or regional accounting procedures. After receiving vaccinations, employees are required to promptly submit appropriate documentation to clear the advance in accordance with agency policy.

**c.** Records of advance of funds, vaccinations, and vouchers for reimbursement are to be maintained by each office as required by agency policy concerning retention of records. If an employee declines the HBV vaccine, a copy of the completed and signed consent/decline form must be forwarded to the office manager who is responsible for forwarding it (using a sealed manila envelope with the employee's name and the notation "Medical Records Other") to the appropriate headquarters or regional Human Resource Management Division for inclusion in the employee's

official personnel file. An employee who declines the HBV vaccine may, at a later date, elect to receive the HBV vaccine after completing a new consent/decline form. Declination of the HBV vaccine does not preclude that employee from subsequent assignment to perform on-scene accident investigation or to examine wreckage specimens. When the training and use of personal protective equipment required by the Exposure Control Plan are provided and the employee has been afforded the opportunity to receive/decline the HBV vaccine, exposure to bloodborne pathogens is considered controlled by OSHA regulations. Accordingly, employees who decline the HBV vaccine remain responsible to perform fully their assigned duties as directed by their supervisors. Before receiving the first injection, the employee should read the HBV information provided on FAA Form 8020-22.

d. Once an employee has elected to receive the HBV vaccine, the employee is responsible for:

(1) Discussing medical suitability for HBV vaccine with a healthcare professional of choice.

(2) Receiving the HBV vaccine series of three injections in accordance with the 6-month series process.

(3) Obtaining the signature of the healthcare professional on the original consent/ decline form to document receipt of the HBV vaccine series.

(4) Completing, signing, and dating the consent/decline form and sending it to the office manager who is responsible for forwarding it (in a sealed manila envelope with the employee's name and the notation "Medical Records Other") to the appropriate headquarters or regional Human Resource Management Division for inclusion in the employee's official personnel file.

**5. Personal Protective Equipment**. On-scene investigators will be required to use personal protective equipment. FSDO's will be the primary source of personal protective equipment for FAA personnel except for major NTSB "Go Team" investigations when AAI will be the primary source. The respective FSDO manager is responsible for ensuring that an adequate supply of protective biohazard equipment is available. Details on the selection, care, and use of disposable and nondisposable personal protective equipment are provided in the Exposure Control Plan.

6. Records. Medical and training records will be kept for all employees covered by an Exposure Control Plan. An employee's HBV vaccination status record shall be kept in accordance with current occupational medical record requirements. Initial and recurrent training records will be maintained at the FAA field office. When the inspector transfers from one office to another, initial and recurrent training records will be transferred with the inspector to the new duty station. Exposure incident records are kept by the FAA Clinical Services, AAM-230, for headquarters staff or the Regional Medical Office for regional or FSDO staff. Details for retaining records are specified in the Exposure Control Plan for each office. Procedures specified in FAA Order 1280.1A, Protecting Privacy of Information About Individuals, should be followed when keeping the records.

**7. Responsibilities.** The National Employee Safety and Workman Compensation Division, AHP-500, has responsibility for ensuring that FAA bloodborne pathogens policy contained in this order is accurate in light of the OSHA Bloodborne Pathogens Standard and related regulations as they relate to the bloodborne pathogens program. AAI and the Environment and Occupational

Safety & Health (EOSH) Services Group, AJW-23, have joint responsibility for the accident investigation Bloodborne Pathogens Exposure Control Program in headquarters. The regional Occupational Safety and Health Managers have this responsibility in the regions. Title 29 CFR Part 1960, Basic Program Elements for Federal Employee Occupational Safety and Health Programs, encourages local offices to form a safety committee to help develop and monitor an occupational safety and health program for that office. FAA made this a requirement with the release of the Occupational Safety, Health, and Environmental Compliance Committee Charter signed by the Administrator on March 18, 1996. Each facility is responsible for appointing a Collateral Duty Safety Officer. The Collateral Duty Safety Officer within each facility should be, and in some offices is, required by a labor agreement to help in the development of occupational safety and health programs and also to act as a conduit for occupational safety and health information. Considering the purpose of these committees and the function of the safety officers, it is consistent that their duties include participation in the administration/management of the Bloodborne Pathogens Exposure Control Program. Responsibilities for the Collateral Duty Safety Officer, safety committees, and other participants in the program are as follows:

#### a. National/Regional Safety Manager Responsibilities.

(1) AHL-500 will review and comment on all policy changes to the bloodborne pathogens section of this order and will perform the oversight function to ensure that the program is in accordance with policy and the OSHA standard.

(2) AJW-23 and the regional Occupational Safety and Health Managers will:

(a) Provide technical assistance in the operation of the Bloodborne Pathogens Exposure Control Program in headquarters and in field offices participating in the program.

(b) Provide technical assistance in the administration of the required training of the work force regarding bloodborne pathogens awareness (including universal precautions) and respiratory protection.

(c) Serve as the focal point through which office Collateral Duty Safety Officers elevate health and safety issues.

(d) Oversee the operation of the Bloodborne Pathogens Exposure Control Program jointly with AAI.

#### b. Office Safety Committee Responsibilities.

(1) Assist the office manager in establishing the location and management of the supply and distribution of personal protective equipment.

(2) Assist the office manager in identifying and contracting local sources within the geographic area of the office that would dispose of contaminated nonreusable personal protective equipment.

(3) Assist and facilitate the determination and maintenance of employee immunization schedules.

## c. Office Collateral Duty Safety Officer Responsibilities.

(1) Ensure that the Exposure Control Plan developed by the office meets conditions of the program.

(2) Monitor activities in the office to ensure compliance with the Exposure Control Plan.

(3) Provide recommendations on how the office can improve its compliance with the program.

## d. Office Manager Responsibilities.

(1) Ensure that all office personnel assigned to accident investigation duties receive initial training, formally consent or decline the HBV immunization, and complete appropriate records.

(2) Ensure overall development, implementation, and compliance of their area of responsibility with the Exposure Control Plan.

(3) Coordinate with the headquarters Office of Aerospace Medicine and/or the Regional Medical Office to resolve any medical issues which affect the immunization program or any exposure incident which might occur.

(4) Ensure that all affected personnel receive initial and annual recurrent training on controlling the exposure to bloodborne pathogens.

(5) Ensure completion of required documentation for an exposure incident.

(6) Ensure adequate supply of biohazard gear is available.

# e. FAA Investigator-In-Charge (IIC) Responsibilities.

(1) Survey accident site with the NTSB and local authorities to determine if a biohazard exists. If a biohazard exists, secure and control access to the accident site. The IIC will determine suitability of compliance with this directive for each FAA participant who will be required to work on site.

(2) Brief all personnel 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, identify extent of use of personal protective equipment, arrange availability of personal protective equipment for all FAA personnel requiring it, and coordinate disposal of personal protective equipment. Flight Standards will be used as the resource of personal protective equipment for all FAA personnel except for major NTSB "Go Team" investigations when AAI will be the primary source. The FAA is not responsible for furnishing personal protective equipment to participants other than FAA personnel.

# f. Office of Aerospace Medicine Responsibilities.

(1) Resolve any medical issues that evolve which affect the development of an Exposure Control Plan, the vaccination program, or any exposure incident which might occur involving headquarters offices.

(2) Conduct initial evaluations of exposure incidents involving headquarters offices to confirm that the exposure incident occurred.

(3) Maintain exposure incident medical records for all incidents involving headquarters employees.

(4) Administer HBV vaccinations for employees covered by an Exposure Control Plan in headquarters offices.

(5) Provide subject matter experts to support Exposure Control Plan training programs.

# g. Regional Medical Office Responsibilities.

(1) Resolve any medical issues that evolve which affect the development of an Exposure Control Plan, the vaccination program, or any exposure incident which might occur involving field personnel.

(2) Conduct initial evaluations of exposure incidents involving field personnel to confirm that the exposure incident occurred.

(3) Maintain exposure incident medical records for all incidents involving regional personnel.

(4) Provide subject matter experts to support Exposure Control Plan training programs.

## h. Flight Standards Service Responsibilities.

(1) Through regional Flight Standards divisions, provide bloodborne pathogens training programs to FAA field offices whose personnel participate in on-scene accident investigations.

(2) FSDO's will provide personal protective equipment to FAA personnel at accident sites as specified in their Exposure Control Plan.

(3) FSDO's will maintain appropriate stock of personal protective equipment as presented in their Exposure Control Plan.

## i. Office of Accident Investigation Responsibilities.

(1) Jointly with AHL-500 and AJW-23, oversee the operation of the Bloodborne Pathogens Exposure Control Program concerning aircraft accident investigation within the FAA.

(2) Provide bloodborne pathogens training programs for headquarters employees.

(3) Provide personal protective equipment to FAA personnel at an accident site for major NTSB "Go Team" investigations.

### j. Employees Covered by Exposure Control Plan Responsibilities.

- (1) Attend initial and recurrent training programs.
- (2) Comply with the requirements of the Exposure Control Plan that cover their organization.
- (3) Wear the proper personal protective equipment when required.
- (4) Follow appropriate personal hygiene procedures as directed in the Exposure Control Plan.
- (5) Report any exposure incident to supervisor.

#### 8. Forms.

**a.** There are a number of forms that should be used in the process of obtaining HBV vaccination and for reporting an exposure incident. Workers' compensation forms should also be used. All forms may be acquired from the headquarters or regional Human Resource Management Division.

**b.** Examples of the following forms are located at the end of this chapter:

(1) FAA Form 8020-22, Hepatitis B Virus (HBV) Vaccination Consent/Decline (see Figure 10-3). This form provides proof of immunization regarding the administering of the HBV vaccine, dates of injections, lot number of the vaccine, and name of person injected. This form provides a declination statement that the employee is aware of availability of the HBV vaccine but chooses not to be immunized at that time and has the option for future vaccination. Before receiving the first injection, the employee should have the opportunity to read HBV information provided on the form.

(2) FAA Form 3900-6, FAA Mishap Report (see Figure 10-4). This form provides for the documentation of an exposure incident in an FAA facility.

# Figure 10-1

## **FAA Exposure Control Plan**

Facility Name:	
Address:	
Plan Prepared By:	
	(Insert the name of the manager who modified this plan at your facility.)
Date:	
	(Insert the date this plan is put into effect at your facility.)
Date Reviewed for Update:	

1. Purpose. This Exposure Control Plan establishes guidance to protect aircraft accident investigators from bloodborne pathogens that might be encountered during the course of their investigations in the field or during examination of wreckage specimens at a location remote from the accident or incident site. This will be accomplished by mandating the use of universal precautions implemented by work practice controls, engineering controls, personal protective equipment, and biohazard labeling. Hepatitis B virus (HBV) vaccine and post-exposure evaluation will be offered free of charge. Annual training on bloodborne pathogens will be required. Records will be maintained in accordance with the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standard (29 CFR 1910.1030). Within each affected office, an office safety committee has been identified to assist in the management of work practice, engineering, and housekeeping controls.

**2.** Exposure Determination List. A list must be prepared of the position classification and grade series of office staff who have been offered the HBV vaccination series and who may have contact with blood or other potentially infectious materials during an on-scene accident investigation or the examination of wreckage specimens. Figure 10-2, Exposure Determination List, shows a sample listing.

3. Work Practice Controls. The following work practice controls are in place:

**a.** Washing is required. Employees must wash their hands and any other skin with soap and water or flush mucous membranes with water immediately or as soon as feasible following direct contact with blood, body fluids, or other potentially infectious materials. Employees have been instructed in this procedure and know the location of the wash facilities. In the field, employees will use antiseptic towelettes for this purpose, followed by thorough washing as soon as facilities are available.

**b.** After examination, all contaminated wreckage and other specimens are placed in appropriate containers for disposal or archiving. Containers meet the requirements of OSHA Bloodborne Pathogens Standard outlined in 29 CFR 1910.1030(d) (2). Employees have been trained and must follow these procedures.

c. While conducting an accident investigation that has been declared a biohazard or investigating wreckage that is contaminated, personnel are prohibited from eating, drinking, smoking, applying cosmetics or lip balm, handling contact lenses, and doing any actions where a mucous membrane may be touched. In the event that there is a requirement to break from conducting an investigation for any personal needs, the employees have been instructed and must:

(1) Exit the investigation site via the defined entry/exit point.

(2) Discard bio gear

(3) Remove waterproof inner glove and re-glove.

(4) Remove contaminated personal protective equipment following procedures addressed in bloodborne pathogens safety training.

(5) Place disposable personal protective equipment in the identified biohazard bags.

(6) Immediately following the removal of all personal protective equipment, cleanse hands and face with antiseptic towelettes and wash hands and face with soap and water as soon as possible.

**d.** Storage of food and drink is prohibited in places where potentially infectious materials (such as contaminated specimens) are kept or are in the process of transport. This applies to containers such as refrigerators, shelves, cabinets, countertops, and storage compartments in cars and trucks.

**4. Engineering Controls.** A task analysis identified the engineering tasks necessary for accomplishing the field investigation and shop/bench teardown activities (see paragraph 12, Task Analysis for Aircraft Accident Investigators). The following engineering controls apply to the examination of cockpit instruments, seats, restraints, cabin furnishings, and any other aircraft component examined during the conduct of the accident investigation:

**a.** Where hand washing facilities are not readily available (as while conducting an accident investigation), antiseptic towelettes or hand sanitizer are provided for employee use. FSDO managers will ensure the establishment of a location for and manage the resupply of the personal protective equipment kits. Guidelines for the type and quantity of personal protective equipment to keep on hand are in Figure 10-8, Personal Protective Equipment. The office manager will ensure the accessibility of personal protective equipment by investigators within the office and other involved FAA personnel.

**b.** Specimens of blood or other potentially infectious materials are kept in containers that prevent soak-through or leakage during collection, handling, processing, storage, transport, or shipping. When packages that contain blood or other potentially infectious materials are shipped, a biohazard label is affixed to the exterior of the package and all applicable shipping requirements are met.

**c.** Other regulated waste (such as used gloves, soiled laundry, and other contaminated specimens) is kept in a red biohazard container that can hold all contents without leakage during handling, storage, transport, etc. Each office involved in accident investigation will have procedures for management of biohazard waste. These procedures include coordination with authorized disposal

facilities for pickup, receipt, and disposal of the regulated waste. This action will most often occur as soon as practical following departure from the accident site. The office manager will identify the contacts for disposing of regulated waste and ensure employee awareness of the arrangements. In those cases where more than one office is involved, office managers will ensure coordination on the procedures and arrangements.

(1) The authorized disposal facility is \_\_\_\_\_\_ (insert name of authorized disposal facility).

(2) The FAA IIC is responsible for ensuring the disposal of the regulated waste in accordance with the procedures presented in this document.

**d.** Maintenance of proper engineering controls will be the responsibility of the individual office managers.

**5. Personal Protective Equipment**. There are a number of considerations that must be applied in the selection, care, and use of personal protective equipment as follows:

**a.** Disposable personal protective equipment such as moisture proof glove liners, coveralls, and National Institute for Occupational Safety and Health (NIOSH) approved respirator (face mask) is available for all workers at risk of exposure and is provided as part of the accident investigation kit. Personal protective equipment is used whenever exposure to infectious material is possible as specified by universal precautions outlined in OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030(b) (3)). Waterproof glove liners (hypoallergenic gloves, if required) are available to affected employees. Since FSDO's will be the primary source for personal protective equipment except for major investigations, FSDO office managers will ensure the availability of personal protective equipment in their office for use during accident investigations. FSDO office managers will establish methods and means for resupply of personal protective equipment and ensure a readily accessible location for storage of all personal protective equipment. All disposable items will be discarded whenever they are removed or damaged and will be immediately placed in biohazard waste containers.

**b.** The following procedure will be used to inventory and resupply office personal protective equipment: \_\_\_\_\_\_ (insert office procedure and include process for coordination with appropriate personnel from other FAA offices involved in investigations; e.g., Office of Accident Investigation, Office of Aerospace Medicine, Aircraft Certification Directorates, FSDO's, and Regional Medical Office).

**c.** Nondisposable personal protective equipment (such as utility gloves, boot covers, and goggles) is available for all employees who are at risk of being exposed to contaminants. The personal protective equipment is examined for damage before use and replaced as necessary. Nondisposable personal protective equipment is used whenever disposable personal protective equipment from possible puncture or airborne debris. If nondisposable personal protective equipment remains usable, it will be disinfected upon exit from the exposure condition, suitably bagged for transport, and cleansed before return to use.

**d.** Face protection including eye shields or goggles will be used when the risk of splatter or aerosolization of contaminated material may occur.
**e.** Characteristics and quality requirements of certain items of personal protective equipment include being fluid and puncture resistant. Waterproof glove liners should meet or exceed Food and Drug Administration requirements to ensure a quality level of more than 98-percent pinhole free.

**f.** Guidelines on the type and quantity of personal protective equipment items to be kept in supply at each FSDO are presented in Figure 10-8, Personal Protective Equipment.

**6. Housekeeping**. The following housekeeping procedures are generally applicable on or off the accident site and for the storage of accident investigation specimens that may be contaminated:

**a.** Housekeeping procedures for cleaning and decontaminating workstations, nondisposable personal protective equipment, and accident investigation equipment are carried out only by the accident investigators while wearing appropriate personal protective equipment.

**b.** Employees are responsible for ensuring that equipment or surfaces are cleaned with an EPA-registered disinfectant or a 10-percent solution of household chlorine bleach and decontaminated following contact with a contaminant if a spill or leakage occurs and when they are finished using them.

**c.** Broken glass from specimens that may be contaminated will be picked up by using a brush, dustpan, forceps, and/or tongs. Implements used for cleaning will be cleaned and decontaminated if necessary.

**d.** Contaminated laundry that is wet and presents a reasonable likelihood of soak-through or leakage from the bag or container is disposed of in containers that prevent soak-through or leakage of fluids to the exterior. Protective gloves are used by all workers who have contact with contaminated laundry. Other protective equipment is available as required.

**7. Hepatitis B Vaccine**. Hepatitis B vaccine has been offered free of charge to employees identified in Figure 10-2, Exposure Determination List. Hepatitis B Virus (HBV) Vaccination Consent/Decline Form (FAA Form 8020-22), Figure 10-3, has been completed for each employee listed. The employees have had the opportunity to read the HBV information on FAA Form 8020-22 before they receive their first injection. Prior to the first injection of the HBV vaccine, (1) an evaluation has been made of the exempt status of the consenting employee who may have previously received the complete HBV vaccination series, (2) antibody testing has revealed that the employee is immune, or (3) the vaccine is contraindicated for medical reasons. At risk employees who consent or decline the HBV vaccine have signed the appropriate forms. The office manager will ensure that the signed consent/decline form is included in the employee's official personnel file. The employee can be reimbursed for the expense prior to receiving the vaccination in accordance with local or regional accounting procedures. According to the Department of Health and Human Services, Centers for Disease Control and Prevention (CDC) your immunization will diminish with age; however, you will always have immunity. A booster shot is not required.

**8.** Labels and Signs. Red color-coding and/or biohazard labels are used to mark all hazardous items. Hazardous items marked with red color-coding and/or biohazard labels include sharp object containers, containers of other regulated waste (laundry, used gloves, etc.), and refrigerators or freezers that hold potentially infectious materials. Containers that are used to transport, ship, or store potentially infectious materials (including U.S. Postal Service's Express Mail, United Parcel Service,

or Federal Express) are also marked with red color-coding and/or biohazard labels. Contaminated areas at the accident site must be marked with biohazard labels to warn personnel who follow.

#### 9. Information and Training.

**a.** All employees with occupational exposure to bloodborne pathogens must participate in a training program during working hours at no cost to the employees. Training must be provided at the time of initial assignment to a job task where occupational exposure may occur and at least annually thereafter. The office manager is responsible for recording the training received by the employees and establishing a schedule for recurrent training. Training for the staff will be provided by

\_\_\_\_\_ (insert the appropriate FSDO name if the office is a field office or the Office of Accident Investigation if the office is a headquarters office).

**b.** The training program must contain at least the following elements:

(1) An accessible copy of the OSHA bloodborne pathogens rule and an explanation of its contents.

(2) A general explanation of the epidemiology and symptoms of bloodborne diseases.

(3) An explanation of the modes of transmission of bloodborne pathogens.

(4) An explanation of the facility management's Exposure Control Plan and the means by which an employee can obtain a copy of the written plan.

(5) An explanation of the methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.

(6) An explanation of the use and limitations of methods that will prevent or reduce exposure.

(7) Information on the types, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment.

(8) An explanation of the basis for selection of personal protective equipment.

(9) Information on the HBV vaccine including its efficacy, safety, method of administration, benefits, and how the employee will be reimbursed for the cost of the vaccination.

(10) An explanation of the procedure to follow if an exposure incident occurs including persons to contact, the method of reporting the incident, and medical follow up that will be made available.

(11) Information on the exposure incident evaluation and follow up that the facility management is required to provide for the employee following an exposure incident.

(12) An explanation of the signs and labels and/or color-coding required by the standard.

(13) An opportunity for questions and answers with the person conducting the training session.

**NOTE**: A trainer conducting the training must be knowledgeable or have immediate access to an expert on the subject matter covered by the elements contained in the training program as it relates to an employee's respective workplace.

**10. Recordkeeping**. Vaccination, medical, and training records are kept for all employees with occupational exposure.

**a.** Vaccination Records. FAA Form 8020-22, Figure 10-3, will be inserted in an employee's official personnel file and maintained in the same manner as other medical records (in a sealed manila envelope). It will include the following:

(1) Employee's name and social security number.

(2) HBV vaccination status (including date of vaccinations, records relating to employee's ability to receive the vaccine, and signed declination form, where applicable).

**b.** Medical Records. In the event that an exposure incident occurs, an accurate record must be maintained for the affected employee and include HBV vaccination status. These confidential medical records are kept for at least 30 years after the person leaves employment in accordance with 5 CFR Subpart E, Employee Medical File System Records. Procedures specified in FAA Order 1280.1A, Protecting Privacy of Information About Individuals, will be followed when maintaining these records. Written permission from the employee is required for access to these medical records except as provided by law. Employee medical records must be provided upon request for examination and copying to employees, to employee representatives, to the Assistant Secretary of Labor for Occupational Safety and Health or the designated representative, and to the Director of the National Institute for Occupational Safety and Health (NIOSH) or the designated representative. NIOSH is a major operating component of the Centers for Disease Control and Prevention under the Department of Health and Human Services. The exposure incident records are kept by the FAA Clinical Services, AAM-230, for headquarters staff or the Regional Medical Office for regional and FSDO staff. If the employee changes jobs to another office covered by an Exposure Control Plan in another region, then the exposure incident records are transferred to the Regional Medical Office of the new region. The exposure incident records include the following:

(1) Employee's name and social security number.

(2) HBV vaccination status (including date of vaccinations, records relating to the employee's ability to receive the vaccine, and signed declination form, where applicable).

(3) All information given to the evaluating healthcare professional in the event of an exposure incident.

(4) A copy of the evaluator's written opinion.

**c.** Training Records. Initial and recurrent training records will be maintained at the FAA field office. When the inspector transfers from one office to another, initial and recurrent training records will be transferred with the inspector to the new duty station. Records of the training

received by employees at risk of occupational exposure are kept in this facility located at

(insert office locations). The records are kept for 3 years from the date of the training sessions. These records are available upon request for examination and copying to employees, to employee representatives, to the Assistant Secretary of Labor for Occupational Safety and Health, and to the Director of NIOSH. These records include the following information:

- (1) Dates of training sessions.
- (2) Material covered.
- (3) Names and job titles of the trainees.
- (4) Name and qualifications of the trainers.

**11. Exposure Incident Evaluation and Follow-up**. An exposure incident is defined as contact with blood or other potentially infectious materials that results from a worker's job duties and creates some potential for infection. Such exposures may include injection through the skin or contact with the eye, mouth, and other mucous membrane, or non-intact skin. In the event of such an incident, the following procedures are followed in this facility:

**a.** The employee should inform the supervisor as soon as possible of an apparent exposure incident.

**b.** Investigators can have accidental exposures while on the job. An occupational exposure is described as anytime contact is made with body fluids or contaminated aircraft wreckage without protection. Examples of occupational exposures are when body fluids come in contact with your eyes, nose, or mouth or you get cut through your suit, gloves or mask. Following exposure the inspector/investigator should report the occurrence to their supervisor and seek medical attention. Seek the attention as soon as practicable. Your doctor may give you a gamma globlin shot (HBIG) if your vaccination status is not clear or unknown. This one time shot will inhibit and neutralize Hepatitis B if you receive the injection within 72 hours of the exposure. This can prevent and block infection with Hepatitis B. If you were not previously vaccinated they may offer Hepatitis B vaccination in addition to the HBIG shot. An immediate post exposure blood test will not reveal hepatitis as there is an incubation period of up to 60 days before it will be detected.

**c.** Toxicology analysis is accomplished on all pilots killed in aircraft accidents. If the investigator has an exposure incident and is concerned regarding the possible presence of HIV/AIDS, accomplish the following:

**d.** Follow procedures described for Hepatitis B. Advise your doctor that you are concerned for HIV/AIDS. Request the doctor to give you a 10 day prescription for COMBIVIR which is a combination of two anti-viral drugs. This is a pill that if taken daily immediately following exposure will help minimize the possibility of the HIV pathogen taking hold in your body. If necessary, CAMI physicians will fax the investigator a prescription, call the pharmacy (405-954-2700) or speak with the treating doctor as necessary to assist the investigator. COMBIVIR is expensive and the investigator will be reimbursed thru the impress fund. You can tell your

doctor that information is available from the U.S. Public Health Service National Clinicians' Post-Exposure Prophylaxis Hotline ([PEPline] 1-888-448-4911). Information from the Centers for Disease Control on this subject is available on-line from:

### http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm

**e.** Call the Civil Aerospace Medical Institute (CAMI) 405-954-6253, after shipping the tox box. Notify them that you have just shipped a tox box, identify the accident (location, etc) and request expedited process due to possible occupational exposure.

**f.** Continue taking the daily COMBIVIR pill until notified that the results are negative. Taking the COMBIVIR pill could possibly give you flu like conditions including diarrhea. If the deceased pilot is <u>positive</u> for HIV the exposed investigator will have to continue taking the COMBIVIR pills for 4 weeks, followed by periodic testing.

**g.** If there are fatalities other than the pilot the inspector/investigator should contact the undertaker/coroner to include blood samples from the deceased. Ensure that the samples are properly labeled as not to get confused with the pilot. Inform CAMI of the additional samples.

**h.** If an occupational exposure is experienced regarding non-fatal injuries the investigator should contact the regional Flight Surgeon for advice and assistance.

**i.** If the FAA IIC becomes aware of another investigator, such as the NTSB, manufacturer, or others experiencing a occupational exposure the same procedures are to be followed and the notification to CAMI will be accomplished by the FAA IIC. The exposure should be reported to CAMI and the FAA IIC can assist and advise the other personnel how to accomplish this process. All expenses for non FAA personnel will be the responsibility of their employer.

**NOTE**: Remember that occupational exposures should be considered an urgent medical concern and it is in your interest to ensure timely post exposure management and administration of HBIG, hepatitis B vaccine, and/or HIV Post Exposure Prophylaxis.

**j**. Appropriate post-exposure protective treatment is offered to the exposed employee and may include immune globulin for hepatitis B. The recommendations of an evaluating physician who is familiar with current U.S. Public Health Service guidelines on post-exposure protective treatment for HIV are followed in the event of HIV exposure.

**k.** Counseling and evaluation of any reported illnesses are provided at no charge to the exposed employee.

**I.** A written opinion by the evaluating healthcare professional stating that the exposed employee has been informed of the results of the evaluation and about any exposure-related conditions that will need further evaluation and treatment is included in the employee's medical record.

**m.** Workers' compensation forms are completed by the appropriate personnel after an exposure incident has been confirmed by the organization conducting the initial evaluation.

**n.** The office manager will direct the completion of required documentation for every exposure incident in this facility. The FAA Mishap Report (FAA Form 3900-6), Figure 10-4, will be utilized and must include at least the following:

- (1) Name of individual exposed.
- (2) Name of source of exposure.
- (3) Description of how the incident occurred and route of exposure.
- (4) Location, date, and time of the incident.

(5) Written evaluation of exposure incident including suggestions for changes in facility procedures and a record of how these changes are implemented for each incident.

**12. Task Analysis for Aircraft Accident Investigators**. Each aircraft accident scene is unique and, by its nature, is disorderly. The tasks required of the aircraft accident investigator cannot be itemized as precisely as those in the clinical or laboratory setting. The IIC must use his or her best judgment as to what personal protective equipment will be needed at a specific site. The biohazard nature of the accident site can range from no readily apparent evidence of blood or body fluids to obvious presence of blood or body fluids. As a minimum, latex/nitrile gloves and eye protection should be used during the initial site survey (adverse weather conditions may require additional personal protective equipment will be required as directed by the IIC. The areas of investigation where there is gross contamination with blood or body fluids should be approached with gloves, shoe protection, disposable body cover, NIOSH-approved respirator (face mask), and eye protection.

**a.** If contaminated specimens are removed from the accident scene for further examination, gloves should be worn while working with the specimens. Either waterproof latex/nitrile-type gloves or utility gloves could be used depending on the condition of the specimens.

**b.** When it is apparent that additional tasks should be taken, it is the responsibility of the investigator to apply common sense consistent with the objective of controlling exposure to bloodborne pathogens and potential personal injury as a consequence of the nature of the wreckage and the environment. The following additional tasks when conducting an accident investigation, along with the use of proper personal protective equipment, should be used to control the potential exposure to bloodborne pathogens:

(1) On-Scene Accident Investigation Tasks.

(a) The IIC will survey wreckage and the site for biohazard potential utilizing Figure 10-6, Site Survey Checklist. (b) If a biohazard exists, the site will be secured and a point of entry/exit established. The IIC will coordinate the biohazard nature of the accident site with the NTSB IIC (if on site), other investigators, and local authorities. The area of possible contamination will be determined, and a biohazard placard will be placed on wreckage nearest the most visible entry to the biohazard area. The IIC will identify investigative tasks needing personal protective equipment and the extent of use of personal protective equipment. The IIC will also advise on personal prohibitions in the conduct of the accident investigation and the contacts that have been made for disposal of regulated waste.

**NOTE**: It is preferred that the conduct of an investigation in the biohazard area and the handling of contaminated wreckage or parts should be accomplished at the same time. The number of participants should be kept to a minimum.

(c) While wearing appropriate personal protective equipment, the packaging of contaminated parts, instruments, or equipment will be conducted using common sense techniques that do not cause needless contamination of personal protective equipment.

(d) If practical, recordkeeping will be assigned to investigators outside the biohazard areas to minimize contamination of recording equipment. If this is not possible and in order to minimize the potential for contamination, procedures should be used to ensure that personnel handling wreckage are not responsible for manipulating recording equipment. Proper procedures would then be followed in decontamination or disposal of equipment.

(e) When exiting the accident site for any reason, dispose of biohazard equipment and use new equipment before reentry to the biohazard area.

(f) Immediately following the procedures in (e) above, re-glove and place nondisposable personal protective equipment in containers marked as suitable for disinfected personal protective equipment. Clean recording equipment and tools with antiseptic towelettes and remove and dispose of inner glove. Wash hands and face with antiseptic towelettes. As soon as practical, wash hands and face with soap and water.

(2) On-Scene Minimum Personal Protective Equipment.

(a) Wear waterproof latex/nitrile-type glove liners under utility work gloves. If the environmental conditions warrant liquid-proof boots, boot covers worn over work boots may be appropriate. Environmental conditions may also warrant goggles.

(b) Mark entry/exit point with a biohazard placard. At this location, place equipment identified in Figure 11-8, Entry/Exit Equipment. When directed by the IIC, investigators identified to enter biohazard areas should apply personal protective equipment such as gloves, goggles, NIOSH-approved respirator (face mask), body cover, and work boot covers as described in Figure 11-9, Personal Protective Equipment.

(c) All containers for disposable and non-disposable items and antiseptic towelettes are utilized as identified during the training program.

(3) Off-Site Accident Investigation Tasks.

(a) In the event that the wreckage is moved to a different location and that it has not been clearly shown to the IIC that the wreckage has been decontaminated all or in part, the on-site procedures will be followed.

(b) If the wreckage is not contaminated or has been declared decontaminated, normal procedures should be followed in the conduct of the accident investigation.

(4) Requirements for Moving or Transporting Wreckage Specimens.

(a) Ideally, all parts that are examined away from the accident site will be cleaned and disinfected before they are transported. If it is permissible to decontaminate parts, an EPA-registered disinfectant or a 10-percent solution of household chlorine bleach should be applied to all exposed areas. However, when cleaning and disinfecting can destroy evidence or damage parts, it will be necessary to transport parts that are contaminated. Appropriate personal protective equipment will be used in preparing parts for transport. All sharp-edged parts will be padded to protect personnel and preserve evidence. Depending on the size of the part and environmental conditions, personal protective equipment in excess of waterproof latex/nitrile-type gloves and work gloves may be required as determined by the investigator. Contaminated sharp objects that are to be transported should be put in appropriate containers apart from nonsharp contaminated objects.

(b) When applying an EPA-registered disinfectant or a 10-percent solution of household chlorine bleach to contaminated parts, a minimum of 30 minutes should elapse or the manufacturer's disinfectant instructions should be followed before the parts are handled with uncontaminated gloves. Approved shipping containers identified during training should be utilized as appropriate and labeled as biohazard if containing contaminated parts.

(5) Security of the Accident Scene.

(a) During on-scene accident investigations, local officials will be requested to establish and maintain security of the site. The IIC and the local authorities will establish the size of the secured area.

(b) Security will be maintained to prevent entry into the area that is a biohazard or a personal hazard.

(c) In most cases, the biohazard area will be located within the secured area. Secured areas will be identified separately from the biohazard area with appropriate markers and signs.

(d) Spectators and news media will not be allowed to enter the biohazard area.

(6) Remote Area Accidents. In remote areas where spectators and news media are not likely to be a factor, the IIC will take reasonable precautions to avoid the possibility of anyone unknowingly walking into the accident scene.

### **Exposure Determination List**

FACILITY NAME: Seattle Flight Standards District Office

ADDRESS: 1601 Lind Avenue Renton, WA 98055

### OFFICE POSITIONS COVERED BY EXPOSURE CONTROL PLAN

POSITION CLASSIFICATIONGRADE/SERIESSupervisory Aviation Safety InspectorFM-1825-15

Aviation Safety Inspector

FG-1825-9/11/12/13/14

10-19

Hepatitis B Virus (HBV) Vaccination Consent/Decline Form					
Department of Transportation					
Federal Aviation Administration					
Name(Type or Print) Allen Jones		Social Securit 111-22-33	•	Telephone Number 206-123-4567	
Facility and Street Address	01 Lind Among SW	111 22 000		200 120 1007	
Seattle FSDO 16 City	01 Lind Avenue, SW	State		Zip Code	
Renton		WA		98055	
YES, I CONSENT to receive HBV vaccine. I have read the information given to me about Hepatitis B virus and HBV vaccine, and I have had the					
I CONSENT to participate in a vaccination program. I understand this includes 3 injections at prescribed intervals over a 6-month period. I further understand that there is no guarantee that I will become immune to the Hepatitis B virus or that I will not experience an adverse side effect as the result of the vaccination.					
NOTE: Health Care Provider (Professional), please evaluate the medical suitability of this patient for HBV vaccine. Please indicate by checking one of the following:					
NEEDS va		ES NOT NEED vaccine		AINDICATED	
Phillip Armstrong, M.D			7/5/92		
Health Care Provider	(Professional) Signature		Date		
		HBV Vaccination Record			
Dose Date Given			rint Name & Signature	Next Date Due	
	505B 505B	Dr. Phillip Armstrong Dr. Phillip Armstrong	Phillip Armstrong, M.D. Phillip Armstrong, M.D.	8/5/92 2/5/93	
<u>2</u> <u>8/3/92</u> <u>3</u> <u>2/5/93</u>	507F	Dr. Phillip Armstrong	Phillip Armstrong, M.D.	2/3/93	
3   2/5/93   50/F   Dr. Phillip Armstrong   Phillip Remidbing, IILB.     Image: NO, I DECLINE to receive HBV vaccine.   I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring HBV infection. I have been given the opportunity to be vaccinated with HBV vaccine at no charge to me. However, I DECLINE HBV vaccination at this time. I understand that by declining this vaccine I continue to be at risk of acquiring HBV, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with HBV vaccine, I can receive the vaccine series at no charge to me. I also understand that the Flight Surgeon responsible for my facility will have access to this form. I understand that declination of HBV vaccine does not relieve me of the requirement to perform assigned investigation of accidents/incidents or examinations of wreckage specimens job functions as directed by my supervisor.					
Allen Jones 7/5/92 Signature Date					
<b>NOTE</b> : This document when completed by either the employee declining the HBV vaccine; or, a health care professional after evaluation indicating vaccine is contraindicated or is not needed; or, the employee consents and completed the HBV vaccination series, must be sealed in an envelope with the employee's name on the outside and then inserted in the employee's Official Personnel File (OPF).					
FAA Form 8020-22 (8-94) Page 1 NSN 0052-00-916-n 6000					

## Figure 10-3 (Continued)

Hepatitis B Virus (HBV)
Information
THE DISEASE
Hepatitis B is a virus that is transmitted by blood and body fluids. People most often become infected with Hepatitis B virus (HBV) through unprotected sexual intercourse with an infected partner or by sharing needles with an infected person. Accident investigators may come in direct contact with blood and body fluids and may be at risk for exposure to HBV. Hepatitis B may be characterized by fever, loss of appetite, nausea, abdominal pain, fatigue, and jaundice. Consequence of Hepatitis B infection might include cirrhosis, liver cancer, or death. In addition, you may become a chronic carrier and be a source of infection to others.
THE VACCINE
Immunization with the Hepatitis B vaccine can prevent acute Hepatitis B infection and can also reduce the chance of death from long term complications of HBV infection. According to OSHA Regulation 29 CFR 1910.1030 (Occupational Exposure to Bloodborne Pathogens), employees who are at risk for occupational exposure to blood must be offered the Hepatitis B vaccination series. Several safe and effective vaccines against HBV use only a portion of the virus and are produced in the laboratory from common baker's yeast cells. It is not made from blood or blood products. The vaccine cannot transmit HBV or other bloodborne pathogens like the human immunodeficiency virus (HIV) The immunization process is a series of 3 doses of vaccine given according to the following schedule:
$1^{st}$ dose:at elected date $2^{nd}$ dose:1 month later $3^{rd}$ dose:6 months after the $1^{st}$ dose
Over 98 percent of healthy people who receive the full course of immunization will develop protective immunity. People who are immune because of natural infection do not require vaccination.
SIDE EFFECTS OF THE VACCINATION
Hepatitis B vaccine is usually well tolerated. Local soreness at the injection site is the most frequent reaction. Low grade fever lasting 48 hours, malaise, fatigue, headaches, nausea, muscle soreness, joint pain (all limited to a few days after vaccination), and rash have been reported. Very rarely have cases of neurological reaction, including Guillain-Barre, been reported. Individuals who are or may be pregnant should discuss the vaccination with their private physician. Individuals who have allergies to yeast or Thimerosal (commonly used in contact lens solution) should not be vaccinated.
Should you have any questions about Hepatitis B vaccine, contact the Regional Flight Surgeon. You may also wish to consult with your personal physician if you have a current illness, chronic medical condition, or doubts regarding allergies.

FAA Form 8020-22 (8-94)

Page 2

NSN 0052-00-916-6000

## Figure 10-3 (Continued)

Н	Instructions For epatitis B Virus (HBV) Vaccination Con	sent/Decline Form
1. The supervisor/manager provides the	consent/decline form to the employee.	
	loyee identification blocks of the consen	employee consents to or declines to receive the t/decline form and by signing and dating in the
	ate Human Resource Management Divisi	l signed form to the supervisor/manager who ion for filing in the OPF. The supervisor/
4. If the employee consents to the HBV	vaccine:	
a. The employee must provide a contract the HBV vaccination.	ppy of the form to the supervisor/manage	r in order to receive funding authorization for
(Professional) to record the med Provider (Professional) must signeceived by the employee. The	gn and date the original form to record th Health Care Provider (Professional) mus the vaccine administered, and the date th	inal form to the Health Care Provider e the HBV vaccine series. Also the Health Care e date and lot number of the HBV vaccine st also record the date each subsequent shot is ne next shot is due by signing and dating the
and appropriate voucher to the		rovide a copy of the form, receipt for payment, ment or clear the applicable portion of the in prescribed time frames.
1 1	accine series (i.e., 3 shots over 6 months) nbursement, clearance of the advance of f	, the employee will return the original form to funds, and filing in the OPF.
	PRIVACY ACT STAT	EMENT
for processing actions related to that is required by Occupationa Collection of your SSN is author identification number. Furnish provide all of the requested in Investigation Bloodborne Pathor of one or more of the following DOT/FAA-811 (Employee Hea		thogens Exposure Control Programs, gulation 29 CFR Section 1910.1030. be used by the FAA as an employee your SSN, is voluntary, but failure to essing actions related to the Accident ollected information will become part
EA & Form 8020-22(8-94)	Page 3	NSN 0052-00-916-6000

FAA Form 8020-22(8-94)

Page 3

NSN 0052-00-916-6000

FAA MISHAP REPORT	
Department of Transportation Federal Aviation Administration	
1. GENERAL MISHAP DATA	
Assigned by Safety and Health Mgr. Report Number  N M - 2 9 3 0 6	
Region  N W  Organization Code  F S D O - 0 1	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Mishap Date  0 6 / 2 9 /  9 3  Mishap Time  0 9 0 0
Mishap Type     Mishap Type       Primary           I   N   J   U   R   Y                   Secondary     N O N E	
Phase of Operation  A C C  I D E N T    I  N V E S T  I G A T  I O N	
Total Number Exposed  0  1	
Narrative of Mishap During an accident investigation conducted by Mr. Allen Jones, it was necessar some of the cockpit instrument readings. While reaching through some wreckage to clear wet debut the back of his right hand was cut by a jagged piece of metal. The jagged metal was also coated appeared to be blood. Mr. Jones was only wearing disposable latex/nitrile exam gloves.	ris from an instrument face, d with some wet debris that
Corrective Action All investigators are reminded of the need to use caution at the accident site and equipment; in this case, puncture resistant utility gloves.	
Cause Puncture wound sustained by contact with jagged metal while not wearing protective glov	es
Reported By     P E T E R      S M I T H  I   I     I     I     I                 I <thi< th="">     I     <thi< th="">     I&lt;</thi<></thi<>	Report Date  07 /  06 /  93
Completed by Safety and Health Mgr.     Report Complete Image: Entered By  R   K   W  I L S O N	
FAA Form 3900-6 (10-85)	

# Figure 10-4 (Continued)

II. PERSONNEL DATA
Name    A L L E N    JO N E S                  SSN    2 2 2     3 3     5 5 5 5    Age    5 6      Sex    M    Grade    G S  -    3          Job Title    A V     S A F E T Y     I N S P E C T O R             Job Assignment    A C C    I D E N T    I N V E S T    I G A T    I O N                     Total Experience     1 0    Experience in Type       5        5
III. INJURY/ILLNESS DATA
Illness Code   10   Nature of Injury/Illness   L A C E R A T I O N    III     Part of Body   B A C K    O F    R I G H T    H A N D    IIII     Severity   L L O S T    T I M E    IIIIIIII   IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
IV. PROPERTY DATA
Government Property   N O N E     III     Government Property   ID   N/A     Additional Property   N O N E    IIII     Additional Property   N O N E    IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
Name      N / A      Series
Total Experience               Experience in Type

# Bloodborne Pathogens Exposure Incident Evaluation

Date of Accident 6/29/93	Time of Accident 6:30 a.m.			
Date of Exposure Incident 6/29/93	Time of Incident 9:00 a.m.			
Location of Exposure Incident Seattle International Airport				
Employee's Name Allen Jones	SSN 111-22-3333			
Facility LocationSeattle FSDO	Facility Telephone 206-123-3323			
DESCRIPTION OF EXPOSURE INCIDENT - INCLUDE ROUTE(S) AND CIRCUMSTANCE(S): Mr. Jones cut his hand on a jagged piece of metal wreckage in the cockpit area while reaching to clear some wet debris from the face of a cockpit instrument. The jagged metal appeared to be coated with blood.				
SOURCE NAME (If Known): Unknown				
SOURCE HBV/HIV STATUS (IF KNOWN):HBV ( ) Positive ( ) Negative (X) UnknownHIV( ) Positive ( ) Negative (X) Unknown				
EMPLOYEE HEPATITIS B IMMUNIZATION STATUS:Immunized(X) Yes) NoImmunization Date:#1 7/92#2 8/92#3Antibody titer 1AdequateDate 7/5/93Date 7	2/93 1/5/93			
DETERMINATION OF EXPOSURE: (X) Exposure Incident	() Nonexposure Incident			
INITIAL EXPOSURE INCIDENT REPORT TO: (X) Employee Date 7/6/93	(X) Manager Date 7/6/93			
INFORMATION SENT TO HEALTHCARE PROVIDER EVALUATING EXPOSED EMPLOYEE: Healthcare Provider Name Dr. Brent Blue Street Address 111 Skyline Drive City, State, ZIP Woodside, WA 98711 Telephone 206-849-1727 (X) Copy of OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030) (X) Employee's Vaccination Status (X) Description of Employee's Duties Relevant to Incident				
Street Address111 Skyline DriveCity, State, ZIPWoodside, WA 98711Telephone206-849-1727(X)Copy of OSHA Bloodborne Pathogens Standard (29 CFR 1910.1(X)Employee's Vaccination Status				
Street Address111 Skyline DriveCity, State, ZIPWoodside, WA 98711Telephone206-849-1727(X)Copy of OSHA Bloodborne Pathogens Standard (29 CFR 1910.1(X)Employee's Vaccination Status	030)			

### Site Survey Checklist

Site Survey Checklist

1. Establish if there is an injury/fatality in the probable areas of investigation. If so, identify entry/exit point to biohazard area.

2. Conduct general survey of the accident site. Wear latex/nitrile gloves and eye protection.

3. Determine if contamination of investigator's personal clothing is probable considering accessibility to wreckage and environmental conditions that may cause the misting or splashing of blood or body fluids.

4. If crouching, kneeling, or lying is required to inspect within the wreckage, full personal protective equipment is required. If an erect position can be maintained or the only need to crouch is outside the wreckage, then only partial personal protective equipment may be necessary. The IIC will establish the proper personal protective equipment.

5. If there is visible moisture or significant wind in the vicinity of the site, full personal protective equipment may be required.

6. The IIC coordinates disposal of the regulated waste.

7. Personal Prohibitions and Decontamination Guidance. While within the biohazard area, accident investigation personnel are prohibited from eating, drinking, smoking, applying cosmetics or lip balm, handling contact lenses, and doing any other actions where a mucous membrane may be touched. If there is a requirement to break from conducting an accident investigation to take care of any personal needs, the investigator must:

**a.** Exit the accident investigation site via entry/exit point.

**b.** Remove contaminated personal protective equipment and decontaminate nondisposable personal protective equipment in accordance with procedures.

**c.** Place disposable and nondisposable personal protective equipment in biohazard bags.

**NOTE**: Following removal of all personal protective equipment, clean hands and face with antiseptic towelettes and, as soon as possible, wash hands and face with soap and water.

## **Entry/Exit Equipment**

Items located at the marked (biohazard placard) entry/exit to the accident site are identified below:

Equipment	Quantity
Biohazard waste bag (nonsharps)	4 bags
Biohazard signs	Entry signs/labels
Biohazard tape	1 roll
Investigation tools	As required
EPA-registered disinfectant	1 can (or a 10-percent solution of household chlorine bleach)
Antiseptic towelettes	3 packets
Waterproof latex/nitrile-type disposable exam gloves	At least 6 pair per investigator
2-inch duct tape (used for coveralls repair, sealing, etc.)	180 feet
Spray Floor Wax	As required
Other	As required

### **Personal Protective Equipment**

Disposable Equipment Requirements for Each Investigation Event

The calculation of the factor to be used in determining the number of disposable items is based on multiplying the number of injury or fatality events times the assumption that on the average 1.5 inspectors participate at the same time in the accident investigation, and that each inspector will on the average exit the accident site 2.5 times.

EXAMPLE: FSDO X averages 100 injury or fatality accidents and incidents each year. Therefore, the factor for determining the number of disposable items is  $100 \times 1.5 \times 2.5 = 375$ . Call this factor an investigation event which will then be used to calculate the number of disposable items.

The following list provides the number of disposable items anticipated to be required for each investigation event. The anticipated accident investigation environment may also indicate that other choices of equipment should be made.

Prepackaged kits are available and eliminate the possibility of forgetting an item.

Disposable Equipment	Quantity Required for Each Accident Investigator
Waterproof latex/nitrile-type disposable exam gloves	6 pair
Coveralls	2 pair
NIOSH-approved respirator (face mask)	3 masks
Antiseptic towelettes	3 packets
Biohazard tape	1 roll
Boot Covers	2 pair
Goggles	1 pair
Hard Hat	Optional
Spray Floor Wax	As required
Other	As required

#### **Procedure for Disinfectant Selection**

#### 1. General

**a.** OSHA requires that employees who use commercial disinfectants ensure that the products are registered by the EPA as effective against HIV and HBV.

**b.** The EPA maintains an Antimicrobial Unit Hotline which can be accessed to determine if a disinfectant is acceptable. The telephone number is 1-800-858-7378.

**c.** An in-house prepared disinfectant that is also approved by EPA consists of a 1:10 mixture of bleach (sodium hypochlorite) and water.

#### 2. Procedure

a. Obtain the EPA registration number from the disinfectant's label or from the supplier.

**b.** Call the Antimicrobial Unit Hotline at 1-800-858-7378.

**c.** Ask if the EPA registration number is listed by EPA as effective against both HIV and tuberculosis.

**NOTE**: There currently is no EPA testing protocol for evaluating a disinfectant's efficacy against HBV. Thus, OSHA requires the use of a disinfectant that has passed the tuberculosis testing protocol. This is because the organism that causes tuberculosis is known to be more resistant than HBV, and a biocide that will destroy tuberculosis will also destroy HBV.

### Chapter 11. Commercial Space Mishap Notification, Response, and Investigation Section 1. General

**1.** Overview. The Commercial Space Launch Act of 1984, as amended, authorizes the Secretary of Transportation to oversee and coordinate United States 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 70115 of 49 U.S.C., Subtitle IX, Chapter 701, 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 United States. On June 5, 1989, the Department of Transportation's (DOT) former Office of Commercial Space Transportation and the National Transportation Safety Board (NTSB) executed Appendix H to the Reimbursable Memorandum of Agreement (MOA). Appendix H outlines the relationship between the Associate Administrator for Commercial Space Transportation (AST) and NTSB and NTSB's role in commercial space transportation accident investigations. Specifically, NTSB will investigate certain types of commercial space transportation mishaps. However, subject to the provisions of Section 304(a)(1) of the Independent Safety Board Act of 1974, as amended, nothing in Appendix H 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 launch mishap.

**2. Purpose, Scope and Objectives.** The purpose of this chapter is to identify and define the responsibilities of the various parties involved should a commercial space launch mishap (accident, incident, or other occurrence), as defined herein, occur for which the FAA has responsibility. In so doing, this chapter:

**a.** Defines terms specific to AST and commercial space launch mishaps.

**b.** Identifies reportable mishaps (mishaps that NTSB and FAA would investigate and incidents and other mishaps that FAA/AST would investigate, participate in the investigation of, or request reports relating thereto).

**c.** Describes the notification, reporting, and response roles and responsibilities of the FAA, AST, NTSB, Department of Defense (DOD), and FAA licensed commercial operators.

**d.** Defines the categories of events for which AST may request representation or support from other FAA organizations or exterior agencies and/or a copy of any related documentation.

#### 3. Definitions.

**a. Mishap.** Mishap means a launch or reentry accident, launch or reentry incident, launch site accident, failure to complete a launch or reentry as planned, or an unplanned event or series of events resulting in a fatality or serious injury (as defined in Title 49 CFR 830.2), or resulting in greater than \$25,000 worth of damage to a payload, a launch or reentry vehicle, a launch or reentry support facility or government property located on the launch or reentry site.

#### b. Launch Accident.

(1) Launch Accident means - An event that causes a fatality or serious injury (as defined in Title 49 CFR 830.2) to any person who is not associated with the flight;

(2) An event that causes damage estimated to exceed \$25,000 to property not associated with the flight that is not located at the launch site or designated recovery area;

(3) An unplanned event occurring during the flight of a launch vehicle resulting in the impact of a launch vehicle, its payload or any component thereof:

(a) For an expendable launch vehicle, outside designated impact limit lines; and

(b) For a reusable launch vehicle, outside a designated landing site.

(4) For a launch that takes place with a person on board, a fatality or serious injury to a space flight participant or crew member.

**c. Launch Incident.** Launch Incident means an unplanned event occurring during the flight of a launch vehicle, other than a launch accident, involving a malfunction of a flight safety system or safety-critical system or failure of the licensee or permitee's safety organization, design or operations.

**d.** Human Space Flight Incident. Human space flight incident means an unplanned event that poses a high risk of causing a serious or fatal injury to a space flight participant or crew.

e. Personnel Injury. A fatal or serious injury, as defined herein, of a civilian or a launch team member occurring in a launch related area or facility.

f. Mission Failure. A failure to complete the mission as planned.

**g.** Commercial Operator. A nongovernmental entity licensed by the FAA/AST to conduct commercial space launch/launch activities or to operate sites and facilities where commercial space launch/launch activities take place.

**h.** Commercial Space Launch. A space launch authorized to be conducted under a license issued by the FAA/AST.

**i.** Fatal Injury. As defined in 49 CFR §830.2, a fatal injury means "an injury that results in death within 30 days of the accident."

**j.** Flight Safety System. A generic term referring to airborne/ground systems involved in, but not necessarily limited to, tracking, evaluating, or command and control of a commercial launch vehicle that is necessary to protect public safety. Examples include all tracking, display, and flight termination systems used during a commercial activity.

**k.** Flight Termination System. A safety system designed to cause thrust termination of any stage at any time in flight from launch to orbital insertion or impact.

**l. Impact Limit Line**. A line predetermined in advance of the launch establishing a boundary beyond which a launch vehicle, or any portion thereof, or its cargo will not be allowed to impact. A major function of the impact limit line is to provide for public safety.

**m.** Launch Vehicle. Any vehicle constructed for the purpose of operating in or placing a payload in outer space and any suborbital rocket.

**n. Probable Cause**. Event(s) determined by the investigation team to be the most likely cause of the accident/incident based on the available facts/data.

o. Public Area. Any area outside the confines of the launch range property.

**p. Federal Range Operator**. A Government entity (e.g., 45<sup>th</sup> Space Wing, 30<sup>th</sup> Space Wing, or Wallops Flight Facility) providing one or more range functions (e.g., manpower, facilities, tracking instrumentation, data collection, and safety).

q. Serious Injury. As defined in 49 CFR §830.2, a serious injury means any injury which:

(1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date the 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.

(5) Involves second- or third-degree burns or any burns affecting more than 5 percent of the body surface.

**4. Other Identified Mishaps.** Other Identified Mishaps means any mishap not meeting the above definitions of an accident or incident, or events identified by AST which, due to their nature or assessed impact, could have an adverse effect or impact upon the United States commercial space launch industry. Other identified mishaps include, but are not limited to, the following:

**a.** The intentional destruction of the launch vehicle via activation of the Flight Termination System by either the Range Safety Officer or onboard fault/failure detection devices.

**b.** The inadvertent reentry from orbit of a launch vehicle stage or other launch vehicle parts associated with an FAA licensed launch, after the successful launching thereof, resulting in property damage, personal injuries (as defined in 49 CFR § 830.2) or fatalities.

**c.** The unintended impact of a launch vehicle, its payload, or any component thereof on a launch site whose operation is licensed or experimental permitted by the FAA or within the designated launch limit lines.

**d.** A fatal or serious injury (as defined in 49 CFR § 830.2) of a civilian or a launch team member occurring on a launch site, whose operation is licensed by the FAA, or during a FAA licensed or experimental permitted launch event.

**e.** An unauthorized or unapproved activity or FAA license or experimental permitted violation occurring at a FAA licensed launch site or during a FAA licensed or experimental permitted launch vehicle operation.

**f.** Property damage exceeding \$25,000 to a payload, launch vehicle, property at a FAA licensed launch site, or US Government property.

**g.** Accidents or incidents involving non-FAA licensed use of a space launch vehicle, vehicle stage, system, launch process, procedure, or support equipment identical to those licensed by the FAA; or operators licensed or experimental permitted by the FAA conducting non-FAA licensed or experimental permitted launch activities identical to those for which they are licensed or experimental permitted by the FAA.

**h.** Mission failures of events preceding or immediately following a FAA licensed launch activity of such a serious nature that it prohibits the accomplishment of primary mission objectives, such as achieving orbit, improper orbit insertion, or catastrophic payload failure<sup>1</sup>.

# Chapter 11. Commercial Space Mishap Notification, Response, and Investigation Section 2. Notification, Response, and Reporting Requirements

**5. Information Requirements**. This information is recorded on the AST Mishap Report Worksheet (see Figure 11-2). The inability to provide all of the data in the initial notification shall not delay or impede initiation of the notification process. It is of the utmost importance that the notification process be initiated as soon as possible. The individual reporting or receiving a mishap report shall attempt to ascertain the following details concerning the event:

- **a.** Date, time, and location (launch site).
- **b.** Launch vehicle operator (if applicable).
- c. Launch site operator (if applicable).
- d. Individual reporting mishap (name, number, organization, etc.).

**e.** Description (midair collision/explosion, crash [intact ground/water impact], midair disintegration, etc.).

- f. Specific location of mishap.
- g. Effects (damage/casualties).
- **h.** Mission/operational phase in progress at time of occurrence.
- i. Possible/probable causes.
- j. Current situation (e.g., fire/explosive/toxic/chemical hazards present).
- **k.** Emergency response procedures in effect (e.g., rescue-recovery/damage control).
- **l.** Responsible/controlling authority and individual point(s) of contact.
- m. Other individuals notified or to be notified and results of notification (complete/incomplete).

#### 6. Notification/Response Requirements.

**a.** Notification requirements are dependent upon functional responsibilities and reporting requirements inherent to the FAA/AST entity or position. Paragraphs 7-15 identify mishap notification responsibilities relative to who is to notify whom, when notifications are to be made, and how notifications are to be communicated.

**b**. The notification requirements will be incorporated into the AST Mishap Notification and Response Handbook that will contain mishap notification diagrams and lists. Mishap notification diagrams will be developed and tailored to provide a quick visual reference as to who is to be notified, from whom notifications are to be received, and to whom notifications are to be made. A corresponding mishap notification list will detail the office and home telephone numbers, regular

emergency pager numbers, cellular telephone numbers, and e-mail addresses of the individuals to be notified.

**c.** Procedures relative to the initiation of investigations and other related follow-on actions to a mishap are addressed in Section 3 of this chapter.

**d.** Figure 11-1, AST Related Mishap Notification Process (Expanded) provides an overview of the entire FAA/AST commercial space mishap (accident/incident/other occurrence) notification and response process.

7. Licensed Operators. FAA licensed operator notification requirements are specified in 14 CFR §415.41, Accident Investigation Plan, and in the terms and conditions contained in the licensee license orders. Section 415.41(b) of CFR 14 specifies that the licensed operator shall provide immediate accident and incident notification to the Washington Operations Center. However, some FAA licensees have, at their own discretion, made provisions in their accident investigation plans for additional notification and coordination with the AST safety inspector (if present) or the AST duty officer.

**8.** Department of Defense and National Aeronautics and Space Administration Ranges. A number of licensed commercial launch site operators are located on or with DOD and NASA missile launch ranges.

**a.** An FAA and DOD MOA specifies that Cape Canaveral Air Station (CCAS) and Vandenberg AFB (VAFB):

(1) Use the speediest means available to notify the FAA Washington Operations Center of a commercial space launch accident.

(2) Provide accurate and timely communications to AST regarding:

(a) Commercial space launch mishaps.

(b) Military space launch mishaps involving licensed commercial launch operators or launch vehicles commonly employed in commercial launches.

**b.** An FAA/NASA MOA when appropriate will provide for similar Washington Operations Center AST notification.

**9.** Associate Administrator for Commercial Space Transportation, AST-1. Upon notification that a mishap has occurred, AST-1 will confirm or specify, relative to the circumstances, that the Administrator, the Deputy Associate Administrator for Commercial Space Transportation, the Special Assistant for External Affairs (AST-5), the AST Mishap Response Coordinator, and the Washington Operations Center have been notified. AST-1 will verify via AST-200 or AST-300 in the case of an experimental permitted that all specified notifications herein have been accomplished. AST-1 may also, if deemed necessary or appropriate, activate the AST-1 Mishap Notification Response Team or direct the AST Mishap Response Coordinator to convene the Mishap Response Working Group (MRWG).

### a. Accident Notification and Response.

(1) AST-1 will provide direct telephone or e-mail notification to the Administrator and key U.S. Senate and House of Representatives staff members as soon as possible following an FAA licensed or experimental permitted launch or launch site mishap.

(2) Upon request, AST-1 will provide an informational briefing to the Administrator and key U.S. Senate and House of Representatives staff members following the FAA licensed or experimental permitted launch or launch site mishap.

**b.** Other Identified Mishap Notification/Response. As soon as possible following an FAA licensed or experimental permitted launch, a launch site incident, or other identified mishap, AST-1 will provide an informational briefing and distribute "talking points" by:

- (1) Conference to:
  - (a) Washington Operations Center.
  - (b) Associate Administrator for Aviation Safety, Aircraft Certification Service, and

Office of Accident Investigation.

(c) Chief Operating Officer Air Traffic Organization and Air Traffic Airspace

Management Program.

(d) Office of Communications.

- (e) Office of Government and Industry Affairs.
- (f) Office of the Chief Counsel.
- (g) Assistant Administrator for Policy, Planning, and Environment.
- (h) Others as appropriate.
- (2) E-mail to:
  - (a) The Administrator.
  - (b) Chief of Staff, AOA-2.
- (3) Telephone to key U.S. Senate and House of Representatives staff members.

**10. Deputy Associate Administrator for Commercial Space Transportation, AST-2.** In the absence of and in full consultation with AST-1, AST-2 will assume the above notification and response responsibilities of AST-1.

**11. Special Assistant for External Affairs, AST-5.** This office is the public affairs representative for AST and has the responsibility, at the direction of AST-1, to ensure that AST's conduct and representations external to the FAA are properly coordinated with AOC. AST-5 shall assume primary responsibility for:

**a.** Coordinating AST's public response to a mishap.

b. Developing generic public response statements for use by AST safety inspectors.

**c.** Assisting AST-1 in preparing and disseminating mishap information to senior FAA and DOT officials.

**d.** Coordinating the development and release of proposed public statements, as necessary or required, with the Department of State, DOD, DOT, NASA, NTSB, or other FAA functional areas.

**12. AST Mishap Response Coordinator.** The Associate Administrator for Commercial Space Transportation is responsible for identifying and providing a mishap response coordinator. Under the direction of AST-200, the mishap response coordinator shall be responsible for:

**a.** Developing and maintaining the AST Standard Operating Guidelines (SOG) contained within the Crisis Management Handbook and ensuring that AEO-200, Emergency Operations & Communications, has an up-to-date copy.

**b.** Working with the Washington Operations Center in developing and setting up the FAA Command Center AST primary communications network.

**c.** Assisting AST-1 and the Washington Operations Center in coordinating and convening the FAA AST MRWG.

**d.** Assisting AST-5 in the preparation, coordination, and dissemination of post-mishap event reports.

e. Interfacing with AAI, AEO-200, concerning the development of this chapter, the AST Mishap Notification Response Handbook, and AST simulation exercises.

**13. AST Mishap Response Working Group**. The AST MRWG will consist of, but may not be limited to, the following FAA officials or their designated representative(s):

- **a.** Administrator.
- **b.** Deputy Administrator.
- c. Manager, Operations Center Complex.
- d. Chief Counsel.
- e. Assistant Administrator for Communications.
- f. Associate Administrator for Commercial Space Transportation.
- g. Associate Administrator for Aviation Safety.
- h. Director of Accident Investigation.

**14. AST Mishap Notification Response Team**. The Mishap Notification Response Team is an AST internal crisis response working group established to assist AST-1 in addressing and responding to those individuals, entities, situations, and circumstances relevant to the occurrence of a mishap that would not require a coordinated response from the higher level AST MRWG.

a. The Mishap Notification Response Team shall consist of the following:

- (1) Associate Administrator for Commercial Space Transportation, AST-1.
- (2) Deputy Associate Administrator for Commercial Space Transportation, AST-2.
- (3) Special Assistant for External Affairs, AST-5.
- (4) Manager, Space Systems Development Division, AST-100.
- (5) Manager, Licensing and Safety Division, AST-200.
- (6) FAA/AST Counsel.
- (7) AST Crisis Response Coordinator.
- (8) AST duty officer.
- (9) AST safety inspector (if assigned or as designated).

**b.** AST-1 may augment the team with other AST personnel, FAA technical experts, or personnel from other relevant Federal Government entities. Team assembly, including place, method, and modes of communication, shall be at the discretion of AST-1.

**15. AST Compliance Monitor/Safety Inspector.** AST provides a compliance monitor/safety inspector for each FAA licensed or experimental permitted launch. AST also monitors FAA licensed launch site operators on an as-needed/required or annual basis.

**a.** Each inspector assigned to the Licensing and Safety Division, AST-200, is required to qualify as an AST safety inspector and is provided with a current copy of the AST Mishap Notification Response Handbook.

**b.** The AST safety inspector is responsible for ensuring that his/her Mishap Notification Response Handbook is up to date and complete relative to an assigned launch or inspection.

**c.** The AST safety inspector is required to notify immediately an AST duty officer if the inspector observes or is informed of a launch vehicle or launch site mishap. If the AST duty officer has not been assigned or cannot be contacted, the inspector is to contact AST-200, AST-1, and AST-2 (see Figure 11-1).

**d.** The AST safety inspector shall provide as much of the information possible as specified in paragraph 5. However, priority shall be given to providing initial mishap (accident, incident, or other identified mishap) notification to AST.

**e.** The AST safety inspector may, by direction of AST-1, AST-200, or AST-300 provide notification to specific AST staff and engineering assigned to the AST Mishap Notification Response Team (see paragraph 20).

**f.** In responding to a mishap, the AST safety inspector, as appropriate or directed, will identify and establish contact with local representatives of the following entities:

(1) Recovery, rescue, and law enforcement organizations.

(2) Federal/state emergency management agencies.

- (3) U.S. Space Command.
- (4) DOD Range Safety and Security Office.
- (5) NASA Range Safety and Security Office.

**g.** The AST safety inspector is to continue attempts to gather and report all data items identified in paragraph 5. As soon as conditions or circumstances permit or upon request, the inspector shall complete and provide a signed copy of the AST Mishap Report Worksheet to the:

(1) Associate Administrator for Commercial Space Transportation, AST-1.

- (2) Manager, Licensing and Safety Division, AST-200.
- (3) AST Mishap Response Coordinator (accident only).

**h.** In the event of a mishap requiring the dispatch of an AAI-100 IIC, the AST safety inspector shall provide support as necessary to the FAA AAI-100 IIC.

**i.** After reporting the event to the AST duty officer or AST-200 if a duty officer is not assigned, the AST safety inspector shall take direction from either the duty officer or AST-200.

**16. AST Duty Officer.** The Compliance Monitoring and Inspection Team (CMIT) Leader, with the concurrence of AST-200 or AST-300, assigns a qualified Licensing and Safety Division personnel the function of AST duty officer for each FAA licensed or experimental permitted launch. The duty officer is responsible for ensuring that his/her Mishap Notification Response Handbook is up to date and complete relative to the assigned launch. The CMIT leader at the requisite prelaunch or preinspection team meeting will verify and validate that the duty officer's Mishap Notification Response Handbook is current and complete.

**a.** Mishap Notification and Response. Standardized notification and reporting procedures, as shown in Figure 11-1, have been developed and coordinated with the FAA Washington Operations Center. Those procedures provide for the automatic notification of the AST duty officer (and almost simultaneous notification of AST-1, AST-200 and AST-300) by the Washington Operations Center of a mishap reported by an FAA licensed or experimental permitted launch or launch site operator.

(1) After being notified by the Washington Operations Center, if the AST duty officer has not been contacted by the AST safety inspector, the duty officer shall provide notification to the safety inspector. An inspector may not be present at a launch site if FAA licensed or experimental permitted commercial launch activities or a scheduled inspection is not in progress. However, AST safety inspector notification and verification will not be undertaken until the specified and required AST duty officer notifications have been completed.

(2) By direction of AST-1, AST-200 or AST-300, the duty officer shall notify members of the AST Mishap Notification Response Team.

**b.** Other Mishap Notification and Response. When notified that prespecified "other mishaps" have occurred, the duty officer shall notify AST-200, or AST-300 AST-1, AST-2, and, by direction of AST-1, AST-200, AST-300 the AST Mishap Notification Response Team members.

(1) Depending upon the specific "mishap" reported or at the direction of AST-1, the duty officer may notify the Washington Operations Center. Teleconferencing between the inspector, the duty officer, AST-200, or AST-300AST-1, and AST-2 will be provided, upon request, by the Washington Operations Center.

(2) By direction of AST-200 or AST-1, the duty officer will establish any necessary coordination between AST, the Washington Operations Center, and Cornerstone Regional Operations Centers.

**c.** The AST duty officer is to continue attempts to gather and report all data items identified in paragraph 5 from all available sources. As soon as conditions and circumstances permit or upon request, the AST duty officer shall complete and provide a signed copy of the AST Mishap Report Worksheet to the:

- (1) Associate Administrator for Commercial Space Transportation, AST-1.
- (2) Manager, Licensing and Safety Division, AST-200.
- (3) AST Mishap Response Coordinator

**17. AST Assistant Inspector/Duty Officer.** The AST Compliance Monitoring and Inspection plan and the AST Licensing Process and Procedures directive provide for an assistant inspector/duty officer to assume, as necessary, either the role of the AST safety inspector or the duty officer. That individual, when required to assume either position, also inherits inspector/ duty officer notification and response responsibilities.

**18. AST Compliance Monitoring and Inspection Team (CMIT) Leader.** The CMIT leader has no direct or explicit mishap notification or response requirements. However, the CMIT leader is required to conduct a CMIT meeting prior to each launch or inspection. The primary purpose of the meeting is to ensure that the AST safety inspector and duty officer are adequately prepared to initiate the AST mishap notification and response process should a mishap occur during their respective tours of duty. To that end, the CMIT leader is responsible for verifying that the AST safety inspector's and the duty officer's Mishap Notification Response Handbooks are current, complete, and relevant to the assigned launch or inspection. Prior to the prelaunch or inspection CMIT meeting, the CMIT leader is responsible for ensuring that:

**a.** The applicable range or launch site, licensee or experimental permitted points of contact, and respective emergency contact number(s) have been identified and provided to the inspector, the duty officer, and the Washington Operations Center.

**b.** The Washington Operations Center has a current copy of the FAA Mishap Response Handbook AST Mishap Notification and Response Team List (Tab 4 of AST's Standard Operations Guidelines). **c.** The Associate and Deputy Associate Administrators for Commercial Space Transportation and AST-200 and AST-300 have up-to-date mishap notification diagrams and lists in their respective Mishap Notification Response Handbook.

**d.** The AST licensed or experimental permittee's operators list containing the names, office addresses, and emergency telephone numbers (home, pager, or cellular) of the chief executive or operations officer, as provided by AST-1 (this information may only be available to AST-1 and restricted to AST-1's Mishap Notification Response Handbook), onsite representatives, and other personnel deemed critical to the launch or inspection is current and included in the supporting documentation section of the Mishap Notification Response Handbook.

**e.** The AST Compliance Monitoring and Inspection plan stipulates that the CMIT leader is to assume, as necessary, the role of the AST duty officer or inspector should the assistant AST safety inspector/duty officer be required to assume the role of either the inspector or the duty officer. When required to assume either position, the CMIT leader also inherits those notification and response responsibilities relative thereto.

**19. Manager, Licensing and Safety Division, AST-200**. It is the responsibility of AST-200 to ensure that the AST mishap and notification response process functions as intended, and that those AST personnel having identified responsibilities relative thereto are knowledgeable and prepared to participate efficiently and effectively when called upon to do so.

**a.** It is the responsibility of AST-200, in consultation with AST-1, to ensure that the Mishap Notification Response Handbook, mishap notification diagrams and lists, and other appropriate information and data contained in the supporting documentation section of the handbook are developed and properly maintained. This includes identification of applicable points of contact at DOD, NASA, NTSB, and other Federal, state, and local government entities. AST-200 is also responsible for the development and implementation of exercises intended to ensure that AST personnel are familiar with this plan, are knowledgeable of their respective copies and contents of the Mishap Notification Response Handbook, and are capable and prepared to respond accordingly.

**b.** It is also the responsibility of AST-200 to ensure that the necessary interfaces with entities external to AST (e.g., FAA, DOT, ranges, and licensees) have been identified, established, and maintained.

**c. Mishap** (Accident) Notification and Response. When notified by the Washington Operations Center that a mishap has occurred, AST-200 or AST-300 is to:

(1) Ensure or verify, via the Washington Operations Center, that the following have been notified:

- (a) Affected Cornerstone Regional Operations Center.
- (b) Administrator.
- (c) Secretary of Transportation.
- (d) Air Traffic Organization, ATO.
- (e) Advanced Aeronautical Projects Law Branch, AGC-250.

- (f) Office of Communications.
- (g) Accident Investigation Division, AAI-100.

(2) Verify:

(a) Via the AST duty officer that:

1. The AST safety inspector, if assigned, is aware of the event and has responded

accordingly.

2. If directed, the duty officer has notified the AST Mishap Notification Response

Team.

(b) That the following entities, where appropriate, have also been notified or

are aware of the event:

- 1. U.S. Space Command.
- 2. Appropriate DOD/HQ Safety Center(s).
- 3. NASA HQ/appropriate NASA Space Center(s).
- 4. Department of State.
- 5. Other Federal, state, and local government agencies.

(3) Appoint or designate an AST accident investigation team.

**d.** Mishap Notification/Response. When notified by the AST duty officer that a mishap-incident has occurred, AST-200 or AST-300 is to:

(1) Ensure or verify, via the duty officer, that the following have been notified:

(a) Associate Administrator for Commercial Space Transportation, AST-1.

(b) Deputy Associate Administrator for Commercial Space Transportation,

AST-2.

(c) AST Mishap Notification Response Team.

(2) Verify that the AST safety inspector, if assigned, is aware of the event and has responded accordingly.

(3) As directed or as appropriate, ensure that the following are notified or are aware of the event:

(a) Washington Operations Center and the affected Cornerstone Regional Operations Center.

(b) Air Traffic Organization, ATO.

(c) Advanced Aeronautical Projects Law Branch, AGC-250.

- (d) Accident Investigation Division, AAI-100.
- (e) U.S. Space Command.
- (f) Appropriate DOD/HQ Safety Center(s).
- (g) NASA HQ/appropriate NASA Space Center(s).
- (h) Department of State.
- (i) Other Federal, state, and local government agencies.

(4) Appoint or designate an AST Licensing and Safety Division engineer to function as the AST investigator.

e. Other Mishap Notification and Response. When notified that a pre-specified other mishap has occurred, AST-200 or AST-300 shall:

(1) Ensure that AST-1, AST-2, AST staff and division personnel, and AGC-250 have been notified.

(2) Ascertain that the AST safety inspector, if assigned, is aware and responding accordingly.

(3) Depending upon the specific mishap reported or at the direction of AST-1, notify or direct the duty officer (if assigned) to notify (as appropriate) the following:

(a) Washington Operations Center and the affected Cornerstone Regional Operations Center.

- (b) Air Traffic Organization, ATO.
- (c) Accident Investigation Division, AAI-100.
- (d) U.S. Space Command.
- (e) Appropriate DOD/HQ Safety Center(s).
- (f) NASA HQ/appropriate NASA Space Center(s).
- (g) Department of State.
- (h) Other Federal, state, and local government agencies.
- (i) NTSB

(4) Appoint or designate an AST person to function as the AST investigator.

**f.** As soon as conditions or circumstances permit or upon request, AST-200 or AST-300 shall provide a mishap report to AST-1.

**20. Deputy Manager, Licensing and Safety Division.** In the absence of AST-200, the Licensing and Safety Division deputy manager will assume the notification and response responsibilities as stated in paragraph 13 and, as soon as possible, will notify and consult with AST-200.

**21. Washington Operations Center.** When notified of a mishap or at the specific request of the AST duty officer, or AST-200 or AST-300 the Washington Operations Center has agreed to initiate a preset AST teleconferencing network to include the reporting entity, the AST duty officer, AST-200, AST-1, and AST-2.

**a.** The Washington Operations Center has established the AST primary response net to support the MRWG.

**b.** The Washington Operations Center has further agreed to expand either networks, as needed or as requested, to accommodate AST mishap notification and response requirements.

c. The Washington Operations Center, when notified that a mishap has occurred and depending upon the type of mishap, will implement the notifications specified in the Washington Operations Center specific AST mishap notification diagrams, lists, or standard operating guidelines, being certain to obtain the mishap information specified in the guidelines.

**22.** Cornerstone Regional Operations Centers (C-ROC). The Washington Operations Center, by agreement with AST and the Cornerstone Regional Operations Centers, will provide AST launch notification to the cognizant Cornerstone Regional Operations Center and other Cornerstone Regional Operations Centers desiring such notifications. The Washington Operations Center has also agreed to provide notification to the affected Cornerstone Regional Operations Center in whose region a reportable mishap has occurred.

**23. AST Mishap Notification and Response Handbook.** Each member of AST-200, AST-300 and other AST personnel identified in this chapter as having notification responsibilities and requirements shall be provided with a copy of the Mishap Notification Response Handbook containing the appropriate mishap notification diagrams and lists and relevant supplemental information and data. The Associate Administrator for Commercial Space Transportation has tasked AST-200 and the AST Mishap Response Coordinator with ensuring that the handbook and mishap notification diagrams and lists are consistent with this chapter and coordinated with other relevant AST mishap and crisis notification and response policy, guidance, directives, and plans.

**24. Reporting Requirements**. All FAA reportable commercial space launch mishaps shall be recorded on the AST Mishap Report Worksheet (Figure 11-2). The associated information requirements that were previously detailed in paragraph 5 are also discussed in Figure 11-2. A copy of the AST Mishap Report Worksheet shall be provided in all copies of the Mishap Notification Response Handbook.

# Chapter 11. Commercial Space Mishap Notification, Response, and Investigation Section 3. Investigation

#### 25. Responsibility.

**a. NTSB.** The NTSB has the authority to investigate all commercial space launch accidents. DOT (FAA/AST) has given NTSB the additional authority to investigate all commercial space launch accidents outlined in the DOT (FAA/AST) Reimbursable MOA. Specifically, NTSB has agreed to investigate:

- (1) Launch or launch site accidents.
- (2) Impact outside impact limit lines.
- (3) Property damage off range exceeding \$25,000.
- (4) Events subject to Section 304(a)(1)(f) of the Safety Board Act of 1974.
- (5) Other events agreed to by NTSB and AST.

**b. AST.** In addition to the following, AST has the authority to conduct independent investigations parallel to an NTSB investigation:

- (1) Accidents not investigated by NTSB.
- (2) Incidents or other identified mishaps.
- (3) Malfunction of flight safety system.

(4) Failure of safety organizations or safety processes associated with or related to commercial space launches.

(5) Violations of FAA license or license orders.

**c.** Federal Ranges. Federal ranges may conduct their own investigation independent of any NTSB or AST investigation. A DOD/FAA MOA will provide for mutual cooperation and participation between DOD ranges and FAA concerning commercial launch accidents, incidents, or other mishaps on DOD ranges.

#### d. Commercial Operator.

(1) A commercial operator is responsible for establishing an accident investigation plan identifying the procedures and criteria by which the commercial operator will investigate accidents, incidents, and other mishaps. The plan shall identify the commercial operator's procedures for:

(a) Reporting an accident, incident, or other mishaps to AST.

(b) Securing data and off-range wreckage pertaining to an accident, incident, or other mishaps.

(c) Cooperating with the responsible investigating authority during an investigation.

(d) Providing, within applicable provisions of law, copies of all reports and other data pertaining to an accident, incident, or other mishaps as may be required by AST.

(e) Supporting an accident, incident, or other mishap investigation being carried out by the NTSB, AAI, or AST.

(2) The commercial operator may choose to conduct its own investigation of accidents, incidents, or other mishaps independent of any AST investigation. A commercial operator's investigation shall not interfere with any ongoing FAA or NTSB investigation.

**26. AST Investigative Role.** 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. The FAA IIC will be selected by AAI-1.

#### 27. AST Investigative Authority.

**a.** AST may initiate its own investigation during an ongoing NTSB investigation when there are suspected license or permit violations. Such investigations will be conducted separately from the NTSB investigation.

**b.** In fulfilling its duties under the Commercial Space Launch Act, AST may:

(1) Investigate.

(2) Take part in the commercial or range operator's investigation, either as a participant in the investigation or as an observer.

(3) Designate an AST representative to track the investigation process.

(4) Require a copy of the final investigation report.

(5) Obtain a follow up hard copy of any verbal report.

(6) Require clarification and/or resubmission of specific portions of a final report so submitted.

c. An AST investigation will focus primarily on, but not be limited to, the following issues:

(1) Failure of the launch vehicle flight safety system and the causes of such failure.

(2) Significant failure of the ground command system and causes thereof.

(3) Significant failure or errors of the range safety tracking and data acquisition systems and/or in the computer and display systems utilized for public safety protection and the causes of such failures.

(4) Failure in the planning, approval, and operation processes leading to erroneous
or misleading decisions that contributed to increased public risk.

- (5) Failure of critical systems resulting in unplanned reentries that increased public risk.
- (6) Failure of vehicle guidance or other component resulting in:
  - (a) Collision with another spacecraft.
  - (b) Increased risk to other operational spacecraft.
  - (c) Substantial increase in space debris.
  - (d) Violations.

(7) Violation of a term or condition of an FAA license, license order, or AST established safety regulations.

**28. Procedures.** The purpose of an AST investigation is to determine if there was an AST license or permit violation and to make recommendations to AST-1 that, if implemented, will limit or significantly reduce the recurrence of such events.

**a.** In order to accomplish this objective, the AST investigation team will take action to:

(1) Determine if current AST licensing practices, regulations, and standards are adequate to protect against property damage and public injury and recommend necessary changes.

(2) Determine whether there was a violation of AST regulations or of the terms or conditions of the license.

**b.** General Procedures. The following general procedures govern investigations conducted by AST:

(1) The Associate Administrator for Commercial Space Transportation or AST-200 shall appoint an IIC and an investigation team to carry out the investigation.

(2) The investigation will be under the control and direction of the AST IIC.

(3) AST will be solely responsible for releasing factual information of the investigation to the public and will designate the official spokesperson for the investigation.

(4) Group leaders assigned to a particular investigation will work under the direction of the AST IIC and will remain with the assigned group until that phase of the investigation has been completed or they are released by the AST IIC. Group leaders will submit to the AST IIC information obtained during the course of the investigation.

(5) The AST IIC will keep the team informed of the progress of the investigation.

(6) Pertinent records obtained and factual reports prepared during the investigation shall be made available to the AST IIC in a timely and orderly manner.

**c.** Team Selection. The AST IIC and other AST investigation team members, to include consultants and advisors, are appointed by AST-1 or AST-200. Consultants and advisors may be Government employees, contractors, commercial or range operators, industry representatives, or other members of the public. After the initiation of an investigation, if the IIC determines that additional team members are required, additional team member names may be submitted to AST-1 or AST-200 by the IIC for approval. Consultants and advisors will be selected on the basis of their knowledge and experience in the following areas:

- (1) Range safety.
- (2) Flight safety.
- (3) Reliability and quality control (safety procedures).
- (4) Launch vehicle operations.
- (5) Risk analysis.

**d. Team Organization.** The IIC is responsible for determining the organization required for an investigation team and the responsibilities of the team members. Members will perform investigation tasks, complete appropriate forms, recommend corrective action, and submit findings and recommendations to the IIC. The IIC may designate one of the team members to provide administrative support to the team or may request a separate administrator.

### e. Gathering Data, Facts, or Testimony.

(1) When conducting an investigation, AST may, pursuant to the Commercial Space Launch Act, request the range operator, commercial operator, or other participants to provide under applicable provisions of law all appropriate safety and range data documentation pertaining to safety issues. This includes, but is not limited to, flight anomalies, significant equipment failure, range safety actions, and casualties.

(2) In the event additional facts are needed by AST during an ongoing NTSB investigation, FAA personnel may obtain these facts following notification to the NTSB IIC. In obtaining such facts, AST personnel will not interfere with any ongoing NTSB investigation. AST personnel will make it clear that they are not acting under NTSB direction. If the NTSB investigation is not completed, the FAA IIC will notify the NTSB IIC of any AST intent to take any enforcement action.

(3) Wreckage or records will not be released until AST has determined that they are no longer needed. In the event 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 date of the request. AST shall be responsible for any additional storage and security costs.

**f. Preparing Investigation Report.** AST shall prepare a final report to include a narrative description and analysis of how and why the event occurred, findings, probable cause(s), and recommendations. If NTSB has conducted an investigation, its accident report may be incorporated into AST's report by reference and/or as an attachment where applicable.



Figure 11-1 AST Related Mishap Notification Process (Expanded)

### Figure 11-2

### **Example of AST Mishap Report Worksheet**

### a. Information Requirements

The individual reporting or receiving a mishap report shall attempt to ascertain and record the following details concerning the event on the following worksheet:

### 1. Received the information from (name, number, organization, etc.):\_\_\_\_\_

2.	Date and time the information was received:
3.	Date and time of mishap:
	Location of launch site:
5.	Launch vehicle operator (if applicable):
6.	Launch site operator (if applicable):
7.	Type of mishap (accident, incident, or other mishap):
8.	Description:
9.	Specific location of mishap:
10.	Effects
(da	mage/casualties):
	-

### Figure 11-2 (continued)

):
amage control):
:t:
on (complete/
Time

(Name and Title)

#### Figure 11-2 (continued)

Name and Title	Date	Time
Information taken by:		

(Signature)

**b. AST Safety Inspector.** If present at the site of a reportable mishap, the AST safety inspector, after initiating the AST notification sequence, is to continue attempts to gather and report all data items identified in paragraph 5. As soon as conditions or circumstances permit or upon request, the inspector shall complete and provide a signed copy of the worksheet to: *AST-1, AST-200, AST-300 and the AST Mishap Response Coordinator (accident only); and the FAA AAI-100 IIC (accidents only).* 

**c. AST Duty Officer.** After receiving notification of a reportable mishap and complying with the notification/response requirements stated in paragraph 10, the AST duty officer is to continue attempts to gather and report all data items identified in paragraph 5 from all available sources. As soon as conditions or circumstances permit or upon request, the AST duty officer shall complete and provide a signed copy of the worksheet to: *AST-1, AST-200, AST-300, the AST Mishap Response Coordinator (accident only), and the FAA AAI-100 IIC (accidents only).* 

**d.** Manager, AST Licensing and Safety Division (AST-200). As soon as conditions or circumstances permit or upon request, AST-200 shall collect completed and signed copies of the worksheet from the AST safety inspector and/or duty officer, if assigned, and provide a consolidated report to AST-1. If a safety inspector or duty officer was not assigned, AST-200, as recipient of the initial notification, shall be responsible for initiation and completion of the worksheet.

e. AST Mishap Notification and Response Handbook. A copy of the worksheet shall be provided in all copies of the AST handbook.

### Appendix 1. General Information for Aircraft Accident and Incident Notification, Investigation, and Reporting

#### Table of Contents

		Page No.
Part 1.	Lists of Current Forms	
	FAA Forms NTSB Forms Other Forms	A-2, 3, 4 A-4 A-4
Part 2.	Military Aircraft Accident Information	
a. b. Part 3.	Military Safety Center Addresses Message Format for FAA Participation in Investigation FAA and NTSB Maps	A-5 A-6
a.	FAA Flight Standards Service Regional Boundaries FAA International Boundaries Map (Left Blank) NTSB Aviation Regional and Field Offices	A-7 A-8 A-9
Part 4.	Aircraft Certification Directorates and Their Responsibilities	
a. b. c. d. e.	Transport Airplane Directorate (14 CFR 25) Small Airplane Directorate (14 CFR 23) Engine and Propeller Directorate (14 CFR 33 and 35) Rotorcraft Directorate (14 CFR 27 and 29) Geographical Responsibilities for Civil Aeronautical Product Certification in Foreign Countries	A-10 A-11 A-15 A-16 A-17
Part 5.	Investigation Equipment	A-18
Part 6.	Form Used By Regional Airports Division: FAA Form 8020-25, Investigation of Vehicle or Pedestrian Deviation Report	A-20

### Appendix 1. General Information for Aircraft Accident and Incident Notification, Investigation, and Reporting

### Part 1. Lists of Current Forms

a. FAA Forms	ANSN 0072 00 5	National Stock No.		
Form Number	(NSN, 0052-00-prefix <u>Title</u>	or Stocking Point	Unit of Issue	
FAA Form 110A	Aviation Safety Inspectors Credential	APR-110	Sheet	
FAA Form 6040-25	Airway Facilities Technical Inspection Program	867-9000	Sheet	
FAA Form 7230-4	Daily Record of Facility Operation and Personnel Log	024-5002	Sheet	
FAA Form 7230-7.1	Flight Progress Strip - Terminal - Continuous With Center Perforations	806-6001	Box	
FAA Form 7230-7.2	Flight Progress Strip - Terminal - Continuous Without Center Perforations	806-6002	Box	
FAA Form 7230-8	Flight Progress Strip - Terminal-Cut	806-7000	Box	
FAA Form 7230-10	Position Log	024-6102	Pad	
FAA Form 7230-19	Flight Progress Strip - ARTCC (Marginally Punched Continuous Strips)	652-6001	Box	
FAA Form 7230-21	Flight Progress Strip - FSS	628-7001	Box	
FAA Form 7233-1	Flight Plan	027-8000	Pad	
FAA Form 7233-2	Preflight Briefing Log	628-3000	Pad	
FAA Form 7233-5	In-Flight Contact Record	803-6000	Pad	
FAA Form 8000-36	Program Tracking and Reporting Subsystem Data Sheet	893-4002	Sheet	

# Part 1. List of Current Forms (Continued)

a. FAA Forms (continued)								
Form Number	National Stock No. (NSN, 0052-00-prefix <u>Title</u>	or Stocking Point	Unit of Issue					
FAA Form 8000-40	Aviation Safety Investigator	ASF-10	Sheet					
FAA Form 8020-2	Aircraft/Parts Identification and Release	690-3001	Set					
FAA Form 8020-3	Facility Accident Notification Record	633-5002	Sheet					
FAA Form 8020-6	Report of Aircraft Accident	074-5251	Set					
FAA Form 8020-6-1	Report of Aircraft Accident (Continuation Sheet)	074-5301	Set					
FAA Form 8020-9	Aircraft Accident/Incident Preliminary Notice	036-8002	Sheet					
FAA Form 8020-10	Aircraft Accident Data Transmittal	637-7004	Sheet					
FAA Form 8020-11	Incident Report	024-6001	Set					
FAA Form 8020-15	Investigation of Near Midair Collision Report	906-4001	Set					
FAA Form 8020-17	Preliminary Pilot Deviation Report	899-0001	Set					
FAA Form 8020-18	Investigation of Pilot Deviation Repor	t 899-1001	Set					
FAA Form 8020-19	Reclassification of Aviation Incident Report	899-2002	Sheet					
FAA Form 8020-20	Aviation Safety Investigator	AAI-100	Sheet					
FAA Form 8020-21	Preliminary Near Midair Collision	906-5001	Set					
FAA Form 8020-23	FAA Accident/Incident Report	923-1000	Sheet					
FAA Form 8020-24	Preliminary Vehicle or Pedestrian Deviation Report	922-4000	Set					
FAA Form 8020-25	Investigation of Vehicle or Pedestrian Deviation Report	922-5000	Electronic					

# Part 1. List of Current Forms (Continued)

a. FAA Forms (continu								
Form Number	(NSN, 0052-00-prefix <u>Title</u>	or Stocking Point	Unit of Issue					
Various Te	echnical Performance Record	Various	Various					
	es of NTSB forms are available from a map of NTSB offices).	n any NTSB field office						
Form Number	Title							
NTSB Form 6120.1	Pilot/Operator Aircraft Accident/	Incident Report						
NTSB Form 6120.3	Accident File Contents	Accident File Contents						
NTSB Form	Preliminary Report Aviation (3 pages)							
NTSB Form	Factual Report Aviation (5 pages)							
NTSB Form 6120.9	Passenger Statement							
NTSB Form 6120.11	Statement of Witness							
NTSB Form 6120.15	Release of Aircraft Wreckage and Receipt of Aircraft Parts							
NTSB Form 6120.18	Part Tag							
c. Other Forms								
DA Form 2696-R	Operational Hazard Report (Depa	artment of the Army)						
DOT Form 5800.1	Hazardous Materials Incident Re	port						
DOT Form RSPA 298C Report of Financial and Operations Statistics, Small Aircraft Operations								

### Part 2. Military Aircraft Accident Information

#### a. Military Safety Center Addresses:

United States Air Force Air Force Safety Center Aviation Safety Division AFSC/SEF Kirtland AFB, NM 87117-5670

United States Army Commander, USASC U.S. Army Safety Center Fort Rucker, AL 36362-5363

United States Coast Guard Chief, Flight Safety Branch U.S. Coast Guard Headquarters 2100 2<sup>nd</sup> Street, SW. Washington, DC 20593-0001

United States Navy Commander Naval Safety Center Norfolk NAS, VA 23511

### Part 2. Military Aircraft Accident Information (Continued)

### b. Message Format for FAA Participation in Investigation

TELEGRAPHIC MESSAGE								
NAME OF AGENCY	PRECEDENCE	SECURIT	Y CLASSIFICATION					
FEDERAL AVIATION ADMINISTRATION								
ACCIDENT INVESTIGATION DIVISION	ACTION: URGENT							
800 INDEPENDENCE AVENUE, SW			ROUTINE					
WASHINGTON, D.C. 20591	INFO:		KOUTINE					
ACCOUNTING CLASSIFICATION	DATE PREPARED	FILE BOS88FA271						
88-21-895-003	12-12-88							
FOR INFORMATIO			DODUUT	1271				
NAME	PHONE NUMBER	TYPE OF	MESSAGE					
		□ Single	Book	Multiple-				
JAMES MADISON	202-555-5678	_ 5g.c	Doon	Address				
THIS SPACE FOR USE OF COMMUNICATION UNIT								
	O BE TRANSMITTED (Use double spacing and all capital	l letters)						
TO: (COMMANDER OF THE MILITARY UNIT I	N CHARGE OF THE ACCIDENT							
INVESTIGATION)								
INFORMATION FORWARDED TO:								
(APPROPRIATE MILITARY SAFETY CENT	TER - ADDRESS IN APPENDIX 1)							
SUBJECT: AIRCRAFT ACCIDENT (AIRCRAFT TY	YPE, MODEL, SERIAL NUMBER)							
OCCURRING (LOCATION) ON (DATE	E AND TIME)							
1. REFERENCE (MESSAGE, TELEPHONE CALLS,	ETC.)							
· · ·	,							
2. FAA (WILL) (WILL NOT AT THIS TIMI	E) PARTICIPATE.							
3. THE FAA ACCIDENT COORDINATOR IS (GIV	E FULL NAME, POSITION HELD IN FAA.							
SECURITY CLEARANCE, AND DUTY STATION).								
4. OTHER FAA PERSONNEL ASSISTING THE FAA ACCIDENT COORDINATOR ARE: (FOR								
EACH PERSON GIVE FULL NAME, POSITION HELD IN FAA, SECURITY CLEARANCE,								
AND DUTY STATION).								
5. FAA PERSONNEL ARRIVING BY (MOTOR, A	R RAIL) AT (TIME AND PLACE)							
5. TATTERSONNEE ARRIVING DT (MOTOR, A	ik, KAL) AT (TIME AND TEACE).							
6. STATE ANY FAA REQUESTS OR REQUIREME	NTS							
0. STATE ANT TAA REQUESTS OR REQUIREME.	N15.							
STEVE WOODS AN 100								
STEVE WOODS, AAI-100								
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### Part 3. FAA and NTSB Maps





02/02/2010

### Part 3. FAA and NTSB Maps

b. FAA International Boundaries

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Part 3. FAA and NTSB Maps (continued)

# c. NTSB Aviation Regional and Field Boundaries

#### a. TRANSPORT AIRPLANE DIRECTORATE (14 CFR 25)

Directorate Headquarters: Northwest Mountain Region, ANM-1 Transport Airplane Directorate, ANM-100 Transport Standards Staff, ANM-110 (ANM-ROC) International Office, ANM-116 (Foreign Transport Airplanes)

#### Denver Aircraft Certification Field Office, ANM-191D (ANM-ROC)

Air Methods Inc., Englewood, CO Aviat Inc., Afton, WY Garlick Helicopters, Hamilton, MT Hawkins & Powers, Greybull, WY Learjet, Inc., Denver, CO Rocky Mountain Helicopters, Inc., Provo, UT Univair Aircraft Corp., Aurora, CO Universal Corp., Grand Junction, CO

#### Los Angeles Aircraft Certification Office, ANM-100L (ANM-ROC)

Advanced Aerodynamics & Structures, Inc. (Jetcruzer), Long Beach, CA AlliedSignal, Inc., Phoenix, AZ Boeing, Long Beach Division, Long Beach, CA Boeing, McDonnell Douglas Helicopter Systems, Mesa, AZ Gippsland Aeronautics, Australia Hiller Aircraft Corp., Marina, CA Honeywell, Inc., Phoenix, AZ Mitsubishi, Japan Robinson Helicopter, Inc., Torrance, CA Seabird Aviation, Australia Tracor Flight Systems, Inc. (Convair turbojets and turboprops), Goleta, CA

#### Seattle Aircraft Certification Office, ANM-100S (ANM-ROC)

Alliance Aircraft Group, Kent, WA (Helip Couriers) American Blimp Co., Portland, OR (airships) Avian Balloon Co., Spokane, WA (hot air balloons) Boeing Transport Aircraft, Renton and Everett, WA JobMaster, Renton, WA (Howard DNC) Lancair, Bend, OR (Columbia 300) Machen, Inc. (Piper Aerostar), Spokane, WA Pacific Propeller, Kent, WA (propellers) Republic Aircraft Manufacturing, Shelton, WA (RC-3 SeaBee)

Seattle Aircraft Certification Office, ANM-100S (ANM-ROC) (continued) SEMCO Balloon, Coeur d'Alene, ID (hot air balloons) Twin Commander, Arlington, WA U.S. / L.T.A., Eugene, OR (airships) W.E. Lamon, Eugene, OR (deHavilland DHC-1B)

#### b. SMALL AIRPLANE DIRECTORATE (14 CFR 23)

Directorate Headquarters: Central Region, ACE-1 Small Airplane Directorate, ACE-100 Standards Staff, ACE-110 (ACE-ROC) Balloons, Airships, and Gliders Normal, Utility, Acrobatic Commuter Category Foreign Aircraft

#### Anchorage Aircraft Certification Office, ACE-115N (AAL-ROC)

Aero-Twin, Anchorage, AK Aircraft Rebuilders, Anchorage, AK Airframes, Inc., Big Lake, AK Airglas Engineering Co., Anchorage, AK Alaska Aircraft Engineering, Homer, AK Alaska Aircraft Sales, Inc., Anchorage, AK Alaska Tire and Rubber Company, Inc., Chugiak, AK Alaskan Aircraft Engines, Inc., Anchorage, AK All West Freight, Inc., Sterling, AK Arctic Aircraft Co., Anchorage, AK Arctic Transportation Service, Inc., Anchorage, AK AvAlaska, Inc., Anchorage, AK Avionics Specialists of Alaska, Inc., Anchorage, AK B&J Custom Aircraft Cylinders, Inc., Palmer, AK Baker, David; Anchorage, AK Bering Air, Inc., Nome, AK Borer Propellers, Anchorage, AK Burl's Aircraft Rebuild, Chugiak, AK C-1 Aero Fuel, Fairbanks, AK Campbell, John S., Wasilla, AK Cape Smythe Air Service, Inc., Barrow, Kotzebue, and Nome, AK Crosswinds STOL, Wasilla, AK DGA Aviation, Kenai, AK Dan's Aircraft Repair, Inc., Anchorage, AK Era Aviation, Inc., Anchorage, AK Evergreen Helicopters of Alaska, Inc., Anchorage, AK Everts Air Fuel, Inc., Fairbanks, AK

#### Anchorage Aircraft Certification Office, ACE-115N (AAL-ROC) (continued)

F. Atlee Dodge, Inc., Anchorage, AK F.S. Air Service, Inc., Anchorage, AK Frontier Flying Service, Inc., Fairbanks, AK Gavin, Michael D., Fairbanks, AK Jake's Aircraft Salvage, Wasilla, AK Johnson, Joe; Kenai, AK Katmai Air Service, Inc., Anchorage, AK LMM, Inc., Anchorage, AK Leading Edge Exhaust Systems, LLC; Anchorage, AK Lynden Air Cargo, LLC; Anchorage, AK Mitchell Aircraft Company, Anchorage, AK North Pacific Welding, Ketchikan, AK North River Aviation, Inc., Trapper Creek, AK North Slope Borough Search and Rescue, Barrow, AK Northern Air Cargo, Inc., Anchorage, AK Northland Aviation, Inc., Fairbanks, AK Peninsula Airways, Inc., Anchorage, AK Reeve Aleutian Airways, Inc., Anchorage, AK Rust's Flying Service, Inc., Anchorage, AK Sea Air, Inc., Anchorage, AK Silver Bay Logging, Inc., Juneau, AK Take Flight Alaska, inc., Anchorage, AK Wick Air, Inc., Palmer, AK Woods Air Service, Inc., Palmer, AK Yute Air Alaska, Inc., Anchorage and Bethel, AK Zmuda, Bruce V., Fairbanks, AK

#### Atlanta Aircraft Certification Office, ACE-115A (ASO-ROC)

AC Fuel Cells, Memphis, TN Aeromot, Porto Alegre, Brazil Aeronautical Accessories, Blountville, TN Air & Space America, Inc., Paducah, KY Aircraft Modification Design Services, Atlanta, GA Aircraft modular products, Miami, FL Alberta Aerospace, Deland, FL AlliedSignal Commercial Avionics Systems, Ft. Lauderdale, FL American General Aircraft Corp., Greenville, MS Atlantic Aero, Greensboro, NC Avitas, Miami, FL Ayres, Corp., Albany, GA B/E Aerospace, Jacksonville, FL; Delray Beach, FL; Winston-Salem, NC Bonaire, Blountville, TN

#### Atlanta Aircraft Certification Office, ACE-115A (ASO-ROC) (continued)

Chromalloy, Ft. Walton Beach, FL; Tallahassee, FL; Newnan, GA Delta Air Lines, Atlanta, GA East Coast Aerospace Engineering, West Palm Beach, FL Embraer Aircraft, San Jose dos Campos, Brazil Federal Express, Memphis, TN Floats and Fuel Cells, Memphis, TN Gables Engineering, Inc., Coral Gables, FL Grumman Aerospace, Melbourne, FL Gulfstream Aerospace Corporation (DAS), Savannah, GA Gulfstream Aerospace Corporation (TC), Savannah, GA Keathley Engineering, Mobile, AL Kosola and Associates, Albany, GA L3 Communications, Sarasota, FL Lockheed AeroMod, Greenville, SC Lockheed Aeronautical Systems Co., Marietta, GA Lopresti Speed Merchants, Vero Beach, FL Maule Air, Inc., Moultrie, GA MICCO Aircraft Company, Ft. Pierce, FL Michelin Aircraft Tire Corporation, Greenville, SC Mlynarczyk, E.J., Crestville, FL Mod Works, Punta Gorda, FL Orlando Helicopter Airways, Orlando, FL Sikorsky Aircraft, West Palm Beach, FL Sky Cruiser Airship, Elizabeth City, NC Swift Museum Foundation, Inc., Athens, TN Teledyne Continental Motors (TCM), Mobile, AL The Balloon Works, Statesville, NC The New Piper Aircraft Company, Vero Beach, FL Thorpe, Louisville, KY TIMCO (Triad International Maintenance Corporation), Greensboro, NC Walter Kidde Aerospace, Wilson, NC Westinghouse Airship, Elizabeth City, NC Foreign Aircraft and Related Products Certification Responsibility - Caribbean, Central America, and South America

#### Chicago Aircraft Certification Office, ACE-115C (AGL-ROC)

Aeromed Systems, Fargo, ND Aerostar International, Inc., Sioux Falls, SD Aero Ski, Brooten, MN Airborne Express, Wilmington, OH Aircraft Braking Systems, Akron, OH Allied Signal Aerospace Co., (Bendix Wheels and Brakes Division), South Bend, IN

#### Chicago Aircraft Certification Office, ACE-115C (AGL-ROC) (continued)

Allison Gas Turbine Operations, Indianapolis, IN American Champion, Rochester, WI Bellanca Aircraft, Alexandria, MN BFGoodrich Aircraft Wheel and Brake Operation, Troy, OH Cameron Balloons US, Dexter, MI Cirrus Design Corporation, Duluth, MN Classic Aircraft, Lansing, MI Diamond Aircraft, London, Ontario, Canada Eagle Aircraft, Alexandria, MN Eagle Balloons, Huntley, IL Enstrom Helicopter, Menominee, MI Experimental Aircraft Association, Oshkosh, WI Goodyear Tire and Rubber Co, Akron, OH Hartzell Propeller Inc., Piqua, OH Lindstrand Balloons, Hanover, IL Lockheed Martin Tactical Defense Systems (Airships), Akron, OH McCauley Accessory Division, Vandalia, OH Navion Aircraft Company, Ltd., Bowling Green, OH Norton Co., Ravenna, OH OMAC, Norwalk, OH Parker Hannifan Corporation, Avon, OH Quicksilver, Temeccula, CA Rolls-Royce Allison, Indianapolis, IN Spectrum Aeromed, Wheaton, MN Unison (Slick Magneto), Rockford, IL USAF Projects, Wright-Patterson AFB, OH Williams International, Walled Lake, MI Wipaire, Inc., Inver Grove Heights, MN Woodward Governor Co., Rockford, IL Xenair, Midland, Ontario, Canada

#### Wichita Aircraft Certification Office, ACE-115W (ACE-ROC)

Allied Signal Avionics, Olathe, KS Beech Aircraft Co., Wichita, KS Boeing Commercial Airplane Group, Wichita, KS Cessna Aircraft Co., Wichita, KS Collins Division Rockwell International, Cedar Rapids, IA Garmin Avionics, Olathe, KS Kings Engineering Fellowship, Orange City, IA Learjet Inc., Wichita, KS National Ballooning, Indianola, IA RANS Aircraft, Hays, KS

Wichita Aircraft Certification Office, ACE-115W (ACE-ROC) (continued) Raytheon Aircraft Co. (Beech, Beechjet, Hawker), Wichita, KS Rockwell Collins Communications and Avionics, Cedar Rapids, IA Sabreliner, Inc., St. Louis, MO

#### c. ENGINE AND PROPELLER DIRECTORATE (14 CFR 33 AND 35)

#### Directorate Headquarters: New England Region, ANE-1 Engine and Propeller Directorate, ANE-100 Engine and Propeller Standards Staff, ANE-110 (ANE-ROC)

#### Boston Aircraft Certification Office, ANE-150 (ANE-ROC)

Hamilton Standard, Windsor Locks, CT Kaman, Bloomfield, CT Revo Inc., Sanford, ME Sikorsky, Stratford, CT *Foreign Propeller Manufacturer Certification Responsibility* 

#### Engine Certification Office, ANE-140 (ANE-ROC)

CFM Company, Phoenix, AZ CFM International, Cincinnati, OH General Electric, Cincinnati, OH General Electric, Lynn, MA International Aero Engines, Ltd., E. Hartford, CT Pratt & Whitney Aircraft, E. Hartford, CT *Foreign Engines Certification Responsibility* 

#### New York Aircraft Certification Office, ANE-170 (AEA-ROC)

Boeing Helicopter, Philadelphia, PA Bombardier Canadair, Canada Bombardier deHavilland, Canada Grumman, Bethpage, NY Sensenich Corp., Lancaster, PA Schweitzer Aircraft Corp., Elmira, NY Taylorcraft, Lock Haven, PA Textron Lycoming, Williamsport, PA *Foreign Aircraft Certification Responsibility* (except rotorcraft, engines and propellers), Canada

#### d. ROTORCRAFT DIRECTORATE (14 CFR 27 AND 29)

Directorate Headquarters: Southwest Region, ASW-1 Rotorcraft Directorate, ASW-100 Rotorcraft Standards Staff, ASW-110 (ASW-ROC) Foreign Rotorcraft

#### Airplane Certification Office, ASW-150 (ASW-ROC)

Air Tractor, Inc., Olney, TX Aircraft Parts and Development Corp., Laredo, TX Commander Aircraft Co., Oklahoma City, OK DeVore Aviation, Albuquerque, NM EMAIR, Harlingen, TX Fairchild Aircraft Corp., San Antonio, TX Frakes Aviation, Cleburne, TX Mitsubishi Heavy Industries America, Dallas, TX Mooney Aircraft Corp, Kerrville, TX Regal Air Inc., Mount Pleasant, TX Sino-Swearingen Aircraft and Related Product Certification, Mexico

#### Rotorcraft Certification Office, ASW-170 (ASW-ROC)

Bell Helicopter Textron, Ft. Worth, TX Brantly Helicopter Industries USA Co., Ltd.; Vernon, TX Erickson Air-Crane Co., Central Point, OR

# Special Certification Office, ASW-190 (ASW-ROC)

Sky Power Balloons, Vadito, NM

#### e. GEOGRAPHICAL RESPONSIBILITIES FOR CIVIL AERONAUTICAL PRODUCT CERTIFICATION IN FOREIGN COUNTRIES

For all propellers manufactured outside the United States, contact the **Boston ACO** at:

Manager, Boston Aircraft Certification Office, ANE-150 Federal Aviation Administration 12 New England Executive Park Burlington, MA 01803 Telephone: (617) 272-7118 Telefax: (617) 272-7269

#### e. GEOGRAPHICAL RESPONSIBILITIES FOR CIVIL AERONAUTICAL PRODUCT CERTIFICATION IN FOREIGN COUNTRIES (continued)

For aircraft and related products (other than rotorcraft, engines and propellers) manufactured in Canada, contact the **New York ACO** at:

Manager, New York Aircraft Certification Office Federal Aviation Administration 181 South Franklin Avenue, Room 202 Valley Stream, NY 11581 Telephone: (516) 791-6680 Telefax: (516) 791-9024

### Part 5. Investigation Equipment

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. Proper clothing should be the first consideration; good serviceable clothing capable of standing rough usage is recommended. Selection should be appropriate to climate and environment:

- 1. Footwear (steel-toed shoes or boots, rubber overboots, 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).
- b. Other personal items:

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 protectant, and sunscreen lotion.
- 5. Candy bars, gum, cookies, or other quick-energy foods.
- c. The following items are commonly used in investigations:
  - 1. Magnetic compass, small protractor, and Abney level to measure angles of impact.
  - 2. Measuring tape (50 foot or longer) and 6" ruler to put in camera's view.
  - 3. Magnifying glass (10X or stronger).
  - 4. Marking pens, grease pencils, and chalk sticks.

5. Handtools including screwdrivers, pliers, adjustable wrench, tin snips, vice grip, survival knife, crowbar, hacksaw (with spare blades), diagonal cutters, etc.

#### Part 5. Investigation Equipment (Continued)

- 6. Flashlight, spare batteries, and spare bulb.
- 7. Camera including film, flash attachment, and spare batteries.
- 8. Tape recorder, extra blank tapes, and spare batteries.
- 9. Steno pad, clipboard, ruled paper, graph paper, pencils, and pens.
- 10. NTSB and FAA accident report forms.

11. Parts tags with string or wire (NTSB Forms 6120.15 and 6120.18 and FAA Form 8020-2).

12. Passenger and Witness Statements (NTSB Forms 6120.9 and 6120.11) for interviews.

13. FAA Order 8020.11C; Title 49 United States Code, and Sections 830 and 831 of NTSB regulations.

- 14. Grid, county, or state highway maps and sectional (navigational) map.
- 15. Investigator's checklists.
- 16. Clean containers for fuel and oil samples.

17. Small amount of wire, tape, string, or nylon cord to tie and/or secure things.

- 18. Toxicology Mailing Kit (tox box with proper mailing label).
- 19. Small, handheld mirror to look in small, inaccessible locations.
- 20. Small wire or stiff-bristled brush.

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

22. Biohazard equipment

# Part 6. Form Used By Regional Airports Division

#### FAA Form 8020-25, Investigation of Vehicle or Pedestrian Deviation Report

	Incident Report Number				
INVESTIGATION OF VEHICLE OR PEDESTRIAN DEVIATION REPORT					
The Airports Division Office will complete this form after receiving report from Air Traffic Control. Complete and distribute according					
1. Date. Time, and Location of deviation.	2. Type of Deviation (Select one):				
A. Local Date M M D D Y Y B. Local Time	<ul> <li>A. Vehicle (excludes bicycles; includes aircraft being repositioned)</li> <li>B. Pedestrian (includes bicycles)</li> </ul>				
C. Airport ID at Surface Incident Location	<ol> <li>Airport Certificated Under Part 139 of FAA Regulations</li> <li>A. Yes, Specify A1. Full or A2. Limited</li> <li>B. No</li> </ol>				
<ul> <li>4. Deviator Was (Mark one):</li> <li>A. Not Authorized to be on the Airfield (Skip to Item 8)</li> <li>B. Authorized to be on the Airfield, but not on the Movement Area</li> <li>C. Authorized to be on the Movement Area</li> <li>D. Unknown (Skip to Line 10)</li> </ul>	<ul> <li>5. Airport Offers Driver Training Program (Mark one):</li> <li>A. Yes</li> <li>B. No</li> <li>Driver Completed Training Program <ol> <li>Yes, When</li></ol></li></ul>				
<ul> <li>6. Airport Training or Procedures Contributed to V/PD (Mark all that apply):</li> <li>A. Driver Training Program</li> <li>B. Driver Familiarization</li> <li>C. Airport Operational Procedures</li> </ul>	<ul> <li>7. The Driver or Pedestrian Had Inadequate Knowledge or Experience with (Mark all that apply): <ul> <li>A. English Language</li> <li>B. Airport Layout</li> <li>C. Signs, Markings, Signals, or Lighting, Specify</li> </ul> </li> <li>D. ATC Movement Area Procedures</li> <li>E. ATC Terminology or Phraseology</li> <li>F. Unknown</li> <li>G. Other, Specify:</li></ul>				
<ul> <li>8. Facilities, Construction, or Conditions that Contributed to V/PD (Mark all that apply): <ul> <li>A. Unlocked or Open Gates</li> <li>B. Inadequate Fence, Specify:</li> <li>C. Signs, Markings, Signals, or Lighting, Specify:</li> <li>D. Conditions Outside Movement Area, Specify: (e.g., weather, construction)</li> </ul> </li> <li>E. Movement Area Conditions, Specify: (e.g., weather, construction)</li> <li>F. Unknown</li> <li>G. Other, Specify:</li> <li>H. None of the Above, Facilities, Construction, or Conditions Not a Factor</li> </ul>	<ul> <li>9. Investigation Indicates Driver or Pedestrian (Mark all that apply): <ul> <li>A.</li> <li>Was Unable to Locate Route</li> <li>B.</li> <li>Was Disoriented or Lost</li> <li>C.</li> <li>Did Not Observe Markings, Signals, or Lighting</li> <li>D.</li> <li>Did Not Follow Movement Area Procedures</li> <li>E.</li> <li>Did Not Follow Route Assigned by ATC</li> <li>F.</li> <li>Did Not Follow Other ATC Instructions, Specify:</li> </ul> </li> <li>G.</li> <li>Took Inadvertent or Unplanned Actions</li> <li>H.</li> <li>Forgot to Request Clearance</li> <li>I.</li> <li>Believed He/She was Cleared</li> <li>J.</li> <li>Was Distracted, Specify:</li> <li>K.</li> <li>Details not Known to the Inspector</li> <li>L.</li> <li>Other, Specify:</li> <li>M.</li> <li>None of the Above</li> </ul>				
FAA Form 8020-25 (3-02) Supersedes Previous Edition Page	1 NSN: 0052-00-922-5000				

# FAA Form 8020-25 (continued)

11. Description of V/PD and Comments with Recommendations, if	`any:
12. Attachment(s):         A.       FAA Form 8020-24 (required)         B.       Other(s), Specify:	<ul> <li>13. Action(s) Taken or Planned (Mark all that apply):</li> <li>A. No Part 139 Violations</li> <li>B. Letter of Investigation, Specify Date:</li> <li>C. Enforcement Action by Airport Operator</li> <li>D. Procedural Changes</li> <li>E. Capital Development</li> <li>F. Other, Specify:</li></ul>
14. Investigating Airports Division Office:         Routing Symbol       A         15. Inspector Completing Form:         A. Name	<ul> <li>16. Report Distributed To: <ul> <li>A. FAA Region:</li> <li>Including Regional Division Offices:</li> <li>Airports, Air Traffic, and Flight Standards (only if 7A on Form 8020-24 is checked).</li> </ul> </li> <li>Including: <ul> <li>Airport Manager, ATO-102, AAS-300, ATX-400, and AAT-210.</li> </ul> </li> <li>B. Other(s), Specify:</li> </ul>
INSTRUC	TIONS
Within 90 calendar days of the receipt of FAA Form 8020-24, "Preliminary Vehicle or Pedestrian Deviation Report," indicating the occurrence of a V/PD at an airport certificated under 14 CFR 139, FAA Form 8020-25 will be completed. The FAA Form 8020-25 must be assigned the same incident report number as the corresponding FAA Form 8020-24. Instructions on distribution of FAA Form 8020-25 are in FAA Order 8020.11, "Aircraft Accident and Incident Notification, Investigation, and Reporting."	The inspector completing the FAA Form 8020-25 will attempt to ensure that all information reported on FAA Form 8020-24 is complete. If any information on FAA Form 8020-24 is incomplete or inaccurate, the inspector will provide additions or corrections to that information, if it becomes known, in Item 10. Complete all items. If the categories given are inadequate, complete "Other, Specify." Sign and date the form (Item 15) before distribution.

### Appendix 2. Examples of Forms and Procedures Used by Flight Standards Service

#### Table of Contents

#### Page No.

### Part 1. Accident/Incident Investigation Forms

a. NTSB Form 6120.1, Pilot/Operator Aircraft Accident/Report	A-2
b. FAA Form 8020-2, Aircraft/Parts Identification and Release	A-13
c. FAA Form 8020-23, FAA Accident/Incident Report	A-14
d. FAA Form 8020-15, Investigation of Near Midair Collision Report	A-17
e. FAA Form 8020-18, Investigation of Pilot Deviation Report	A-20
Part 2. Other Procedures	A-23
a. Example of Recommendation for Accident Prevention	A-23
b. Accident and Incident Investigation Process for Flight Standards	A-24

#### Part 1. Accident/Incident Investigation Forms

#### a. NTSB Form 6120.1, Pilot/Operator Aircraft Accident/Incident Report

FORM APPROVED FOR USE THROUGH 06/30/2009 BY OMB NO. 3147-0001

#### NATIONAL TRANSPORTATION SAFETY BOARD NTSB Form 6120.1 PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

The pilot/operator aircraft accident/incident report may be filed by mailing in this form, per instructions on the last page. Copies of this form may be obtained from the NTSB Web site <a href="http://www.ntsb.gov">http://www.ntsb.gov</a>, the National Transportation Safety Board Regional Offices, and the Federal Aviation Administration Flight Standards District Offices.

Rules pertaining to aircraft accidents/incidents, overdue aircraft, and safety issues are contained in Part 830 of the National Transportation Safety Board's Regulations, 49CFR. These rules state the authority of the Board, define accidents, incidents, injuries, and other terms, and provide procedures for initial and immediate notification by aircraft pilots/operators.

#### A. APPLICABILITY

The pilot/operator of an aircraft shall file a report with the Regional Office of the National Transportation Safety Board nearest the accident or incident for which immediate notification is required by section 830.5(a) The report shall be filed within ten (10) days after an accident for which notification is required by Section 830.5 or when, after seven (7) days, an overdue aircraft is still missing. An aircraft accident, as defined in 49CFR 830.2, is determined as an occurrence that involves a fatality, serious injury, or substantial damage. For occurrences that do not involve a fatality, the determination that the occurrence is an accident can be appealed by writing to the Director, Office of Aviation Safety, National Transportation Safety Board, 490 L'Enfant Plaza, S.W., Washington, D.C. 20594.

The Pilot/Operator Aircraft Accident/Incident Report Form is used in determining the facts, conditions, and circumstances for aircraft accident prevention activities and for statistical purposes. It is necessary that ALL questions be answered completely and accurately to serve the above purposes. **B. DEFINITIONS** 

 "Aircraft Accident" means an occurrence associated with the operation of an aircraft that 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.

2. "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. NOTE: Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairing 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 wing tips are not considered "substantial damage" for purposes of this report.

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

"Fatal Injury" means any injury that results in death within thirty (30) days of the accident.

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

#### INSTRUCTIONS TO PILOTS/OPERATORS FOR COMPLETING THIS FORM It is necessary that ALL questions on this report be answered completely and accurately. If more space is needed, continue on a blank sheet.

Nearest City/Place: Use the name of the nearest community that has a Post Office in the state where the accident/incident occurred.

 $\textit{Date \& Time:}\ \mbox{Indicate the date and local time of the event. Be sure to indicate the time zone.}$ 

Phase of Operation: Indicate the phase of operation during which the accident/incident occurred.

Aircraft Information: Enter aircraft make and model information as indicated on the aircraft registration certificate, including series. If the involved aircraft is certified as "amateur-built," include the name of manufacturer of the kit or plans when appropriate.

Max Gross Weight: Enter the certificated max gross weight for the aircraft involved in the occurrence. This should be the same as the maximum gross weight indicated on the aircraft weight and balance documents.

Airworthiness Certificate: For light sport aircraft, if aircraft certificated as "Light Sport - Experimental", check both the "Light Sport" and "Experimental" check boxes.

Type of Fire Extinguishing System: If a fire extinguishing system was used to fight an aircraft fire, specify the type(s) of extinguishing system(s) used. Examples include handheld extinguisher, engine fire bottle,

NTSB Form 6120.1 (rev. 10/2006). This form replaces 6120.1/2.

cargo/baggage compartment fire suppression system, or airport emergency ground equipment.

Engine: Enter engine make and model information as indicated on the engine data plate.

Owner/Operator Information: Enter the owner information as shown on the registration certificate. Commercial operators, enter the operator information, including "Doing Business as" when applicable, as shown on the operator certificate.

Revenue Sightseeing Flight: Indicate whether the accident aircraft was conducting revenue sightseeing operations under FAR Part 91 at the time of the accident.

Public Use: Federal, state or local government flight operations such as official travel, law-enforcement, low-level observation, aerial application, firefighting, search and rescue, biological or geological resource management, or aeronautical research. Military operations should not be included under public use. If public use, also indicate whether the flight was conducted by Federal, State, or Local government.

Air Medical Flight: Indicate whether accident flight was being conducted for the purpose of carrying medical personnel, patient(s), or organs.

### Part 1. Accident/Incident Investigation Forms (Continued)

Purpose of Flight (FAR 91, 103, 133, 137): Indicate the type of operation that was being conducted at the time of the occurrence using the following definitions:

PERSONAL—Flying for personal reasons (excludes business transportation) including pleasure or personal transportation. This also includes practice or proficiency flights performed under flight instructor supervision and not part of an approved flight training program.

BUSINESS—includes all personal flying without a paid, professional crew for reasons associated with furthering a business, including transportation to and from business meetings or work. This does not include corporate/executive operations, air taxi, or commuter operations.

EXECUTIVE/CORPORATE—Company flying with a paid, professional crew.

OTHER WORK USE—Miscellaneous flight operations conducted for compensation or hire such as construction work (not FAR Part 135 operation), parachuting, aerial advertising, towing gliders, etc.

INSTRUCTIONAL—Flying while under the supervision of a flight instructor or receiving air carrier training. Personal proficiency flight operations and personal flight reviews, as required by federal air regulations, are excluded.

FERRY—Non-revenue flight under a special flight or "ferry" permit. Refer to 14 CFR 21.197 for details of special flight permit issuance.

POSITIONING—Non-revenue flight conducted for the primary purpose of moving the aircraft to a maintenance facility or to load passengers or cargo, etc.

AERIAL APPLICATION—Operations using an aircraft to perform aerial application or dispersion of any substance. Examples include agricultural, health, forestry, cloud seeding, firefighting, insect control, etc.

AERIAL OBSERVATION—Aerial mapping/photography, patrol, search and rescue, hunting, highway traffic advisory, ranching, surveillance, oil and mineral exploration, criminal pursuit, fish spotting, etc.

AIR DROP—Aerial operations, other than aerial application, that are intended to release items in flight.

AIR RACE/SHOW—includes any flight operations conducted as part of an organized air race or public demonstration.

FLIGHT TEST—Flight for the purpose of Investigating the flight characteristics of an aircraft/aircraft component, or evaluating an applicant for a pliot certificate or rating.

PUBLIC USE—See definition above.

UNKNOWN—Use only if the primary purpose of flight is not known.

Other Aircraft – Collision: For all accidents involving a collision with another aircraft, including parked aircraft, check "Collision with other aircraft" under Basic information and complete this section indicating details about the OTHER aircraft involved in the collision.

Airport information: Complete this section if the accident/incident occurred on approach, takeoff, or within 3 miles of an airport. Please refer to the FAA Airport/Facility Directory or other official source for airport information.

Airport Identification: Provide the official 3 or 4 character airport identifier.

Runway: Indicate the number of the runway used, including L, R, or C if applicable.

Runway/Landing Surface: indicate the type of intended runway/landing surface (do not indicate surface conditions). If the surface type was mixed, check all that apply. Condition of Runway/Landing Surface: Indicate the condition of the Intended runway/landing surface. If multiple conditions existed at the time of the accident, check all that apply.

Weather Information at the Accident/Incident Site: Indicate the weather conditions reported at the accident/Incident site at the time of occurrence. If no weather reporting was available for the accident/Incident site, Indicate the reported conditions at the nearest reporting site. Specify the weather reporting site identifier, the observation time, and distance from the accident/Incident site.

Sky/Lowest Cloud Condition: Indicate the height above ground level of the lowest cloud condition present at the time of the accident and whether coverage was reported as few, scattered, broken or overcast. Also indicate the height above ground level and coverage of the lowest cloud celling present at the time of the accident (reported as broken or overcast).

NOTAMs ((D), (L) and FDC), AIRMETS, SIGMETS, PIREPS: Describe all NOTAMS, AIRMETS, SIGMETS, PIREPS in effect near the accident/incident. For NOTAMS, state if they were distant (D), local (L), or Flight Data Center (FDC), if known.

Pliot Information: indicate the category that best describes the capacity served by this flight crewmember at the time of the accident. The designators "Pliot A" and "Pliot B" do not refer to a specific pliot position or responsibility. If more than one pliot is aboard, they may be entered in any order and their capacity entered as appropriate.

Degree of Injury: See Definitions on the top half of Page 1 of the instructions. Minor injury is not defined. If an injury does not meet the criteria for another injury category, select Minor.

Date of Last Flight Review or Equivalent: Enter the date of the most recent flight review, or equivalent, completed by this pilot. Refer to 14 CFR 61.56 for accepted equivalents.

Type Ratings: List all type ratings on the pilot certificate. If the pilot holds no type ratings indicate "none". If the pilot holds a pilot certificate other than student, and was flying an aircraft requiring an endorsement enter the type and date of any logbook endorsement(s) for that aircraft. See 14 CFR 61 for examples of required endorsements.

Student Endorsements: If the pilot holds a student pilot certificate, enter all solo endorsements and dates on the student pilot certificate.

Flight Time: Complete the flight time matrix. Solo flight time should be included as "Pilot-in-Command (PIC)" and all dual flight instruction given should be included as "Time as instructor".

Additional Flight Crew Members: Complete this section if there were more than two required flight crew members on the aircraft. This also includes a check airman performing official duties, but does not include cabin crew. State the capacity served by each included crewmember at the time of the accident.

Passenger(s)/Other Personnel: Please enter identification and injury severity information for all passengers and other personnel involved in the accident. See page 1 of the instructions for the official definition of injury levels. Occupants are considered "Revenue" passengers if they were being carried for compensation or hire. The option "FAA" refers to any FAA personnel performing a flight related function, including flight check, airman practical test, etc.

Several questions throughout the form allow for multiple responses; when appropriate choose all responses that apply.

These instructions only pertain to major issue areas covered by the NTSB Form 6120.1 *PilovOperator Aircraft Accident/Incident Report.* For additional definitions of questions and responses, please refer to <http://www.ntsb.gov>.

NATIONAL TRANSPORTATION SAFETY BOARD PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT This form to be used for reporting civil and public use aircraft accidents and incidents											
BASIC INFORMATION											
Accident/Incident Lo	cation					D	ate/Time				
						D	ate:	I	ocal Time:		
ZIP:							mm/dd/yyj		Time Zone:		
Latitude:	(dd:mm:ss N	/S) Longitude:		_(ddd:	:mm:ss E/W)						
Phase of Operation           Standing         Taked           Taxi         Climb           Descent         Landi			euvering Other			Collision with Other Aircraft Altitude of In-Flight Midair Occurrence On-ground None		ft MSL			
AIRCRAFT INFO	-					_					
Manufacturer:						Π	Max Gross W	/eight:	Ibs		
Model:								ne of Accident/			lbs
Serial Number:							-	enter of Gravit			_
Registration Number			Amateur-k	built:	🗌 Yes 🗌 N	6			from 🗌 nose		
-							-or-		t Mean Aerody		
Category of Aircraft		Airworthiness ( Il that apply)	Certificate		Number of	Se	ats:		ling Gear		
Balloon	Standar		ial		If Large Airc	raft	, how many seats		ck any additio figuration that		ear
☐ Blimp/Dirigible ☐ Glider	□ Norm	al ⊡R	estricted		Flight C				Tricvcle		ailwheel
Gyrocraft	Utility     Acrob					:		Amphibian		igh Skid	
☐ Helicopter ☐ Powered lift	Trans	port 🗌 E:	xperimental			Emerger		- Emergency Flo	at ⊟SI		
Ultralight			ecial Flight Passenge ght Sport				Float Hull		ci ci/Wheel		
Unknown			gin spon						Unknown		
Type of Maintenance	Program		Last Ins	pecti	on Type			Date Last Ins	ection:		
Annual			🗌 100 He				Airworthiness	-	m	m/dd/yyyy	
Conditional (Amateur Manufacturer's Inspec			AAIP		Conditio	mal Inspection		1: C	me Total Time:hrs		
Other Approved Inspe		n (AAIP)				hours measured at (check one)		ms			
Continuous Airworthi Other, specify:									ection ]	· · · · · · · · · · · · · · · · · · ·	lent/Incident
IFR Equipped			Stall Wa	rning	System Inst	tall	ed	Type of Fire E	xtinguishing	System	
□Yes □No □U	nknown		🗌 Yes 🗌 No 🗌 Unknov					None			
								Specify			
ELT Installed	ELT Activ										
Yes No			Model/S	eries:							
ELT Aided in Locatio	ıg Accident	/Incident	Serial N	umbe	r:						
Yes No			Battery	Type:				Ba	tery Exp. D	ate:	
Engine Type		Reciprocatin System Type	ıg Fuel	Pr	opeller						
Reciprocating     Turbo Shaft		Carburetor			Fixed Pitch		Manufac	turer:			
Turbo Shaft Turbo Fan Carburetor Fixed Pitch Turbo Prop Unknown Fuel Injected Controllable Pitch					Pitel	h Model:					
								Engine Rated			
								Power Measures as (check one)		Time	Time
		Engine		Manu	ifacturer's		Date of Mfg.	as (check one)	Total or Time	Since Inspection	Since Overhaul
Engine Engine Manuf	cturer	Model/Series			l Number		mm/dd/yyyy	lbs of Thrust	(hours)	(hours)	(hours)
Eng. 1									_		
Eng. 2 Eng. 3											
Eng. 4							+				
						_					-

OWNER/OPERATOR INFORMATION										
Registered Aircraft Owner	Owner Address									
Name:	City:									
Fractional Ownership Aircraft: 🗌 Yes 🗌 No	State: ZIP: Country:									
Operator of Aircraft Same As Register	Operator Address Same As Registered Owner									
Name:		City: ZIP:								
Doing Business As: Air Carrier/Operator Designator (4 Character Co	de):	Country:								
Regulation Flight Conducted Under		Revenue Sightseeing Flight								
FAR 91 FAR 129 FAR 91 Specie	l Flight Public Use (select type)	Yes No								
FAR 103         FAR 133         Non-US, Common Commo	Air Medical Flight									
Purpose of Flight for FAR 91, 103, 133, 137 (Select one)	Revenue Operation for FAR 121, 125, 129, 135 (Select one)	Type of Commercial Operating Certificate Held (Check all that apply)								
Personal Business	☐ Scheduled or Commuter ☐ Non-Scheduled or Air Taxi	☐ None ☐ Flag Carrier Operating Certificate (121)								
Executive/Corporate		Supplemental Air Cargo								
Instructional	Domestic or International	Foreign Air Carriers (129)								
Ferry Positioning	Domestic International	Commuter Air Carrier (135) On-Demand Air Taxi (135)								
Aerial Application		Large Helicopter (127)								
Aerial Observation	Cargo Operation Passenger/Cargo	Rotorcraft External Load (133) - or -								
Air Race / Show	PassengerHow many?	Agricultural Aircraft (137)								
Public Use	Cargo lbs	Other Operator of Large Aircraft								
Unknown										
OTHER AIRCRAFT - COLLISION (If air or ground collision occurred, complete this section for other aircraft)										
Aircraft Registration Number Manufacture										
Model:	Substantial None									
Registered Owner of Other Aircraft	Registered Owner of Other Aircraft									
First Name:	ZIP:									
Middle Initial: Last Name:	Countr	ZIP:								
Pilot of Other Aircraft		·								
First Name:	City:									
Middle Initial:	State:	ZIP:								
Last Name:	•	y:								
MECHANICAL MALFUNCTION/FA										
Was there Mechanical Malfunction/Failure? (If yes, list the name of the part, manufacturer, part no.		Total Time/Cycles On Part								
		Hours								
	Cycles									
	Time Since This Part Inspected/Overhauled									
	Hours									
DAMAGE TO AIRCRAFT AND OTHER PROPERTY										
Aircraft Damage Aircraft		Aircraft Explosion								
None Substantial None Minor Destroyed In-Flig	Both Ground and In-Flight     Unknown Origin	None Both Ground and In-Flight In-Flight Unknown Origin								
Destroyed In-File	In-right      Onknown Origin     On-Ground									

Description of Damage to Aircraft and Other Property (use additional sheet if necessary)									
AIRPORT INFORMATION (If th	e accident/incident occu	urred on app	roach, takeoff or	within 3 miles	of an airport, complete this section)				
Airport Identifier:					ter: SM				
Airport Name:			Direction From	m Airport:	degrees MAG				
Proximity to Airport Off Airport/Airs	trip 🗌 On Airport 🔲 🤇	On Airstrip	Airport Eleva	tion:	ft. MSL				
Approach Segment (Select one)									
On Instrument Approach Landi Crosswind Down		e leg v Approach		inal borted Landing (;	after touchdown)				
IFR Approach (Check all that apply)			VFR Approac	h (Check all tha					
□ None □ PAR □ ADF/NDB □ Sidestep		Practice GPS	□ None □ Traffic Patten	n	Stop and Go				
SDF ILS		Loran Unknown	Straight-In	n Following	Simulated Forced Landing				
VOR/DME LOC-back course	Contact		Go Around		Precautionary Landing				
TACAN RNAV	Circling		Full Stop	unway/Landir	Unknown Ig Surface (Check all that apply)				
Runway ID: (L/R/C) Length:	ft Width:	ft	Dry Dry	Snow-	-Compacted 🗌 Water-Calm				
Runway/Landing Surface (Check all that			. □ Holes □ Ice Covered	Snow-					
□ Asphalt □ Grass/Turf □ Mac	adam 🗌 Water		Rough Snow-Wet Wet						
□ Concrete □ Gravel □ Metal/Wood □ Unknown □ Rubber Deposits □ Soft □ Unknown □ Dirt □ Ice □ Snow □ Slush Covered □ Vegetation									
FLIGHT ITINERARY INFORMA	TION								
Last Departure Point	Time of Departure	Destination			Type Flight Plan Filed				
Airport ID:	Time:				□ None □ VFR/IFR □ Company VFR □ IFR				
City: State:	Time Zone:				Military VFR     Unknown     VFR				
Country:		Country:			Activated? Yes No				
Type of ATC Clearance/Service (Check a	all that apply)			I					
□ None □ Special VFR. □ VFR □ IFR	Special Specia			FR Flight Followi affic Advisory	ng Cruise Unknown / NA				
Airspace where the accident/incident oc				,					
Class A Class E		hibited Area tricted Area		☐ Jet Training ☐ TRSA	Area Special Air Traffic Control Area				
Class C Demo Area	Mili	itary Operation	s Area (MOA)	FAR 93	Unknown				
Class D Warning Area Aircraft Load Description (Check all that		port Advisory A	uea						
□ None □ Towing Glide	er 🗌 Para	achutists		Livestock					
Passengers     Towing Bann     Cargo     Other External		ter mical/Fertilizer	/Seeds	Unknown					
FUEL & SERVICES INFORMATION									
Fuel on Board at Last Takeoff	Fuel Type			_					
(convert from pounds, as necessary) Gallons	□ 80/87 □ 100 Low Lead □ 100/130	115/145     Jet A     Automotiv	□ JP3 □ JP4 e □ JP5	□ Oth	er, specify				
Other Services, if Any, Prior to Departu									
· ·									

EVACUATION OF AIRCRAFT											
Was an emergency evacuation of the aircraft performed?											
Method of Exit – Describe how the occupants exited and how many occupants evacuated each location											
WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE											
Weather Observation Facilit				ce of Weather ] k all that apply)	Information			Method of Briefing (Check all that apply)			
Facility ID:				<i>st au mai appiy)</i> ational Weather Se	avice		Company	In Person			
Observation Time:		_	🗌 FI	ight Service Statio			Military	Teletype			
Time Zone:				V/Radio utomated Report			☐ Internet ☐ Unknown	Telephone/Computer Aircraft Radio			
Distance from Accident Site:				ommercial Weathe	r Service (DUA	TS)		TV/Radio			
Direction from Accident Site:	deg	rees MAG						🗌 Unknown			
Briefing Type/Completeness				t Condition				Visibility			
Full Partial / Limited By Pilot	Abbreviat			□ Dawn □ Dusk □ Day □ Night			Dark Night Bright Night	miles			
Partial / Limited By Briefer	Not Pertir			.,	- <u>-</u>		Not Reported				
Sky/Lowest Cloud Condition		Ceiling				Re	estriction to Visibility	(Check all that apply)			
	] Thin Broken ] Thin Overcast	☐ None ☐ Broke					None	□ Fog			
	Unknown						□ Blowing Dust □ Ground Fog □ Blowing Sand □ Haze				
Scattered							Blowing Snow	Ice Fog			
Lowest Cloud Condition Hei	ght	Ceiling	Height				Blowing Spray Dust	Smoke			
	ft AGL				ft AGL						
Wind Direction	Wind Speed	-		Wind Gusts		Ту	pe of Turbulence (C)	heck all that apply)			
Indicated:	Velocity:	KTS	Velocity:KTS				None In Clouds				
degrees MAG	-or-						Clear Air Vicinity of Thunderstorm				
□ Variable	Calm	iabla	Gusting			Severity of Turbulence					
variable		aore		L Not Ousing		ΙH	erate 🗌 Light erate Chop				
NOTAMs (D. L and FDC)	). AIRMETs. S	IGMETs	, PIREPs in effect at the time of			fthe					
	,,,,,,,,,,		,								
	1	cing Forec	ast				Type of Precipitation	on (Check all that apply)			
Temperature:(C)		Amou			Type			Drizzle			
or(F)	īl	None Trace		Moderate Severe	Clear			Ice Pellets Snow Pellets			
Altimeter Setting:i		Light	_		Mixed		🗌 Hail	Snow Grains			
Density Altitude:	-	cing Actua	վ					Ice Crystals Ice Pellets Shower			
·	^	Amou	ut		Type			Freezing Drizzle			
Dew Point:(C) or(F)		None Trace		Moderate Severe	Clear		Intensity of Precipi	tation			
		Light			☐ Mixed		·	oderate 🗌 Heavy			

PILOT "A" INFORMATION												
Pilot "A" Responsibilities at the Time of Accident/Incident												
Pilot Co-Pilot Student Pilot Flight Instructor Check Pilot Flight Engineer Other Flight Crew												
Pilot "A" Identification												
First Nama:				Ci-								
First Name: Middle Initial:					City: ZIP: State: ZIP:							
Last Name:	Co	Country:										
Age at time of Accident/Incident: Date of Birth: Certificate Number:												
mm/dd/yyyy												
Degree of Injury	Seat Occupied			Sea	t Belt			Shoulder H	larness			
None Fatal		Front	Unknov			🗆 Yes 🛛	- 1	Used 🛛 Yes 🗌 No				
☐ Minor ☐ Unknown ☐ Serious		] Rear ] Single		Ava	ilable	Yes [	No	Available	Yes Yes	□ No		
Pilot Certificate(s) (Check all that apply)												
□ None □ Studes		Recreatio	onal	Commerc	ial		Flight Engin	169Y	Foreign			
		Sport Sport	onai	Airline Tr			U.S. Militar		i oreign			
Principal Occupation M	edical Certificate			Me	dical Cer	tificate Va	lidity	Date of L	ast Medica	1		
	None Clas				Without lin	utations/wai	vers					
	Class 1 □ Driv Class 2 □ Unk		e (Sport Pilot	only)	With limitat Unknown	tions/waiver	s	mm/dd	haan			
	·				- maile and a second				2222			
Medical Certificate Limitatio	ns											
Medical Certificate Waivers												
Method Certificate warvers												
Date of Last Flight Review		Flight R	eview Airo	raft								
or Equivalent, Including		Ŭ										
FAR 121/135 Checks:	mm/dd/yyyy	Model:										
Airplane Rating(s)	Other Aircraft Ra			ent Rating(s	)	Instructo	r Rating(s)					
(Check all that apply)	(Check all that apply)			l that apply)								
None None	None None		□ None						Instrument			
<ul> <li>Single-Engine Land</li> <li>Single-Engine Sea</li> </ul>	☐ Airship □ Free Balloon		Airpla		Airplane Single-Engine Instrument H Airplane Multi-Engine Helicopter					Helicopter		
Multiengine Land	Glider		Power	pter ed Lift	Gyroplane Glider							
Multiengine Sea	Gyroplane					Powere			Sport			
	Helicopter Powered Lift											
Type Ratings			1			Student E	ndorseme	nts (Include a	lates)			
									-			
Flight Time (enter appropriate	All Thi	s Make	Airplane Single	Airplane		Inst	rument	-		Lighter		
number of hours in each box)		Model	Engine	Multiengine	Night	Actual	Simulated	Rotorcraft	Glider	Than Air		
Total Time												
Pilot in Command (PIC)				ļ								
Time as Instructor												
This Make/Model												
Last 90 Days												
Last 30 Days												
Last 24 Hours												

PILOT "B" INFORMATION										
Pilot "B" Responsibilities at the Time of Accident/Incident										
🗌 Pilot 📄 Co-Pilot 📄 Student Pilot 📄 Flight Instructor 📄 Check Pilot 📄 Flight Engineer 📄 Other Flight Crew										
Pilot "B" Identification										
First Name:         City:           Middle Initial:            Last Name:         ZIP:           Country:										
Age at time of Accident/Incident: Date of Birth: Certificate Number:										
Degree of Injury Seat Occupied Seat Belt Shoulder Harness							arness			
None Fatal Minor Unknown Serious	Left Right Center	☐ Front ☐ Rear ☐ Single	Unknown	u Used	Used Yes No Used Available Yes No Available					□ No □ No
Pilot Certificate(s) (Check all	that apply)									
□ None □ Studer □ Private □ Flight	nt Instructor	Recrea		Commercia Airline Tra			Flight Engi U.S. Militar	ieer y	Foreign	
Principal Occupation M	edical Certific:	ate		Med	ical Cer	tificate Val	lidity	Date of L	ast Medical	l
	Class 1	Class 3 Driver's Licer Unknown	nse (Sport Pilot	only) 🔲 W		nitations/waivers tions/waivers		nm/dd/j	000/	
Medical Certificate Limitatio	ns									
Medical Certificate Waivers										
Date of Last Flight Review or Equivalent, Including			Review Airc							
FAR 121/135 Checks:		Make:								
	mm/dd/yyyy	Model	: <u></u>							
	Other Aircraft			ent Rating(s)		Instructor				
(Check all that apply)	(Check all that ag ☐ None	oply)		l that apply)						
Single-Engine Land	Airship		☐ None	ne	None Instrument Airplane Airplane Single-Engine Instrument Helicopte					
☐ Single-Engine Land ☐ Airship ☐ Airplane ☐ Airplane Single-Engine ☐ Instrument He ☐ Single-Engine Sea ☐ Free Balloon ☐ Helicopter ☐ Airplane Multi-Engine ☐ Helicopter						encopier				
<ul> <li>Multiengine Land</li> <li>Multiengine Sea</li> </ul>	Glider		Power	ed Lift		Gyroplan			Glider	
Multiengine Sea	Gyroplane					Powered	Lift		Sport	
	Powered Lift									
Type Ratings						Student Er	ıdorsemen	ts (Include da	ites)	
	<u>т</u>	I	Airplane			Tart	rument			
Flight Time (enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Single Engine	Airplane Multiengine	Night	Actual	Simulated	Rotorcraft	Glider	Lighter Than Air
Total Time		er anduer	FEGUE	mannengine		Actual	Sungrated	access to not	Sinter	- and rate
Pilot in Command (PIC)						1				
Time as Instructor						1				
This Make/Model						1				
Last 90 Days										
Last 30 Days										
Last 24 Hours										
ADDITIONAL FLIGHT CREW MEMBERS	(Exclusive of cabin attendants, complete the	ne following informa								
--	--	---	--	---						
Pilot Name and Address			Degree of I							
First Name:	City:		□ None □ Minor	☐ Fatal ☐ Unknown						
Middle Initial:	State: ZIP:		Serious	Unknown						
Last Name:	Country:									
Pilot Certificate(s) (Check all that apply)			Seat Occup							
□ None □ Student □ Recreational □ Private □ Flight Instructor □ Sport	Commercial Flight Engineer Airline Transport U.S. Military	Foreign	□ Left □ Right	Front Rear						
Type Rating/Endorsement for	Total Flight Time at the Time			Single						
Accident/Incident Aircraft? Yes No	of this Accident/Incident:	hrs		Unknown						
Pilot Name and Address			Degree of I							
First Name: Middle Initial:	City: ZIP:		□ None □ Minor	☐ Fatal ☐ Unknown						
Middle Imital: Last Name:	State: ZIP:		Serious							
Pilot Certificate(s) (Check all that apply)	Country:		Seet Orem	:						
	Commercial Flight Engineer	T Remaining	Seat Occup	Front						
None Student Recreational	Airline Transport U.S. Military	Foreign	□ Leit	Rear						
Type Rating/Endorsement for	Total Flight Time at the Time		Center	Single						
Accident/Incident Aircraft?  Yes No	of this Accident/Incident:	hrs		Unknown						
Pilot Name and Address			Degree of I							
			□ Degree of I	njury ∏Fatal						
First Name: Middle Initial:	City: State:ZIP:		☐ Minor	Unknown						
Last Name:	Country:		Serious	_						
Pilot Certificate(s) (Check all that apply)			Seat Occup	ied						
None Student Recreational	Commercial Flight Engineer	Foreign	□ Left	☐ Front						
Private Flight Instructor Sport	Commercial Flight Engineer	i oteign	Right	Rear						
Type Rating/Endorsement for	Total Flight Time at the Time		Center	Single						
Accident/Incident Aircraft?  Yes No	of this Accident/Incident:	hrs		Unknown						
PASSENGER(S) / OTHER PERSONNEL	(Include flight attendants: continue on sens		anu)							
PASSENGER(S) / OTHER PERSONNEL	(Include flight attendants; continue on sepa	rate sheet if necess		÷ د						
PASSENGER(S) / OTHER PERSONNEL	(Include flight attendants; continue on sepa	rate sheet if necess		d ry or njury nown						
PASSENGER(S) / OTHER PERSONNEL	(Include flight attendants; continue on sepa	rate sheet if necess		Fatal Fatal Injury Minor Injury No Injury Unk nown						
Name and Address	· · · ·	rate sheet if necess	Non- Revenue Revenue Non- Occupant FAA	Fatal Serious Injury Injury No Injury Unknown						
Name and Address First Name:	City: State: ZIP:	rate sheet if necess sear	Non- Revenue Revenue Occupant FAA	Fatal Serious Serious Minor Minor Injury No Injury Unknown						
Name and Address	· · · ·	rate sheet if necess sear	Non- Revenue Revenue Occupant FAA							
Name and Address First Name: Middle Initial: Last Name:	City: ZIP: State: ZIP: Country:	rate sheet if necess	Non- Revenue Revenue Occupant FAA							
Name and Address  First Name:  Middle Initial: Last Name:  First Name:  Middle Initial:	City: ZIP: State: ZIP: Country: City: State: ZIP:	rate sheet if necess	Note- Revenue Revenue Occupant FAA							
Name and Address First Name: Middle Initial: Last Name:	City: ZIP: State: ZIP: Country: City: State: ZIP:	rate sheet if necess	Note- Revenue Revenue Occupant FAA							
Name and Address  First Name: Middle Initial: Last Name: First Name: Middle Initial: Last Name:	City: ZIP: State: ZIP: Country: City: State: ZIP: Country:	if necess           if	Non- Revenue Revenue Occupant FAA							
Name and Address  First Name: Middle Initial: Last Name: First Name: Middle Initial: Last Name: First Name: First Name: Middle Initial:		if necess           if y           if y           y	Non- Revenue Revenue Occupant FAA							
Name and Address  First Name: Middle Initial: Last Name: First Name: Middle Initial: Last Name: First Name: First Name: Middle Initial:		if necess           if y           if y           y	Non- Revenue Revenue Occupant FAA							
Name and Address  First Name: Last Name:  First Name: Last Name:  First Name: Last Name:  First Name: Last Name:	City: ZIP: State: ZIP: City: State: ZIP: Country: City: City: State: ZIP: Country:	if necess           if	Non- Non- Revenue Non- Non- FAA							
Name and Address       First Name:       Middle Initial:       Last Name:       First Name:       Middle Initial:       Last Name:       First Name:       Middle Initial:       Last Name:	City:	if necess           ig         ig	Non- Non- Revenue Non- Non- FAA							
Name and Address  First Name:  Middle Initial: Last Name:  First Name: Last Name:  First Name:	City: ZIP: Country: ZIP: City: State: ZIP: Country: City: State: ZIP: State: ZIP: Country: Country:	if necess           ig         ig	Non- Non- Revenue Non- Non- FAA							
Name and Address       First Name:       Middle Initial:       Last Name:       First Name:       Middle Initial:       Last Name:       First Name:       Middle Initial:       Last Name:	City:	intermeter if necess         intermeter if neces	Non- Revenue							
Name and Address         First Name:	City:	intermeter if necess         intermeter if neces	Non- Revenue							
Name and Address           First Name:           Middle Initial:           Last Name:           First Name:           First Name:           First Name:           First Name:	City:	intermeter if necess         intermeter if neces	Non- Revenue							
Name and Address         First Name:	City:	irate sheet if necess         if         if <t< td=""><td>Non- Non- Revenue Revenue Occupant FAA</td><td></td></t<>	Non- Non- Revenue Revenue Occupant FAA							
Name and Address         First Name:         Middle Initial:         Last Name:         Middle Initial:         Last Name:         First Name:         Middle Initial:         Last Name:         Middle Initial:         Last Name:         Middle Initial:         Last Name:	City:	irate sheet if necess         if         if <t< td=""><td>Non- Non- Revenue Revenue Occupant FAA</td><td></td></t<>	Non- Non- Revenue Revenue Occupant FAA							
Name and Address           First Name:           Middle Initial:           Last Name:           First Name:           Middle Initial:           Last Name:           First Name:           Middle Initial:           Last Name:	City:	irate sheet if necess         if         if <t< td=""><td>Non- Non- Revenue Revenue Occupant FAA</td><td></td></t<>	Non- Non- Revenue Revenue Occupant FAA							
Name and Address         First Name:         Middle Initial:         Last Name:         Middle Initial:         Last Name:         First Name:         Middle Initial:         Last Name:         Middle Initial:         Last Name:         Middle Initial:         Last Name:	City:	if necess         if s	Von- Non-							
Name and Address         First Name:	City:	if necess         if s	Von- Non-							
Name and Address           First Name:           Middle Initial:           Last Name:           First Name:           First Name:           First Name:           First Name:           First Name:	City:	if necess         if s	Von- Non-							
Name and Address         First Name:	City:	if necess         if g	Volumentaria Non-							
Name and Address         First Name:         Middle Initial:         Last Name:	City:	if necess         if g	Volumentaria Non-							

NARRATIVE HISTORY	OF FLIGHT	(Please type or print in ink)

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State time and point of departure, intended destination, and services obtained.

RECOMMENDATION (How could this accident/incident have been prevented?)

Operator/Owner Safety Recommendation

10

ADDITIONAL INFORMATION (Please type or print in ink)	
Use this space if additional space is needed for any answers.	

I HEREBY CERTIF	Y THAT TH	E ABOVE INFORMATION IS COMPL	ETE AND ACCURATE TO THE BEST OF	MY KNOWLEDGE	
Date of this Report		and Name of Pilot/Operator			
mm/dd/5559	Signature:_ Type or Pri				
		Filing Report if Other than Pilot/Operato			
Signature:					
Type or Print Name: Title:					
FOR NTSB USE ONLY					
NTSB Accident/Incid	lent No.	Reviewed by NTSB Regional Office	Name of Investigator	Date Report Received	
		1	1	II	







POSTAGE WILL BE PAID BY ADDRESSEE

NATIONAL TRANSPORTATION SAFETY BOARD 490 L'ENFANT PLAZA SW WASHINGTON DC 20077-9367

(FOLD AND TAPE CLOSED BEFORE MAILING)

### b. FAA Form 8020-2, Aircraft/Parts Identification and Release

Fede	Department of Transport Transport Adminis		1. Section			
	OR OFFICE CONTRO		release			
SECTION 1 Aircraft/Part Identification						
N- 89765	Make/Model	Serial No.	2. Section			
	C-172F	9136756	of a painspect			
Part Name	Part No.	Serial No.	- Inspect			
Landing gear	21543	222111	3. Section			
			part is			
Nature of Defect/Difficul	ty		(i.e., in			
Fractured mounting	holes		4. Section			
Hours of Service	Since Overhaul	Since Last Inspection	release . (i.e., ir			
1400		1057	(1.0., 1			
	e of Investigation (Checl	1357 k One)	5. Section			
1)P	of investigation (enee		that he			
□ Accident ⊠	Incident 🗌 N	Ialfunction or Defect	test of			
SECTION IL	Owner Release	of Aircraft Part				
SECTION	- Owner Release		Always			
		ed aircraft part is released	1. Check			
		ion for use in an official	2. Compl			
investigation.	request that: (Che	ck One)	3. Obtain			
1. Tests be n	hade as necessary even	though they may result	numbe 4. Compl			
in damag	e to the part, and the	part returned to me.	4. Compi			
2 🛛 You may	make necessary tests	and dispose of the part.	Upon receip			
Owner or Authorized		Date	1. Check			
Frank Mailer	8	9/28/88	2. Check			
		.,,	part, b			
Address (Number and	Street, City, State, ar	nd Zip Code)	- 3. When repair			
123 High Street		<b>A</b> ,	Section			
Warwick, RI 03103			beetion			
Owners Phone # 2	14-565-3313		When an air			
B. $\Box$ Receipt for A		ed by FA A	1. Obtain			
Owner or Authorized		Date	addres 2. Check			
Owner of Authorized	Signature	Date	2. Check by FA			
			- signatu			
SECTION IIIFA						
Signature of FAA Insp	pector	Date	After the FA aircraft part,			
Region	District	Office	·			
8						
SECTION IV - No	otice		Origi			
Notify the	local FAA Inspector b	before the	Com			
NOTICE:	attached part is	unpackaged, disassem-	Сору			
	l or inspected.		- "Hard			
Witness of disassembl						
Signature of FAA Insp	pector	Date				
FAA Form 8020-2	Attach	Hard Copy to Aircraft/Part				

## FUNCTIONS OF THE AIRCRAFT/PART IDENTIFICATION AND RELEASE TAG

- 1. Section II A provides owner with a receipt for aircraft part released to the FAA for official investigation;
- Section II A items 1 and 2 provide instructions to the recipient of a part when an FAA inspector is to witness disassembly, inspection, or test;
- Section II B provides the FAA with a receipt when an aircraft part is released to the owner or his authorized representative (i.e., insurance company) after the investigation is complete;
- Section III provides the FAA with a receipt when an aircraft is released to the owner or his authorized representative (i.e., insurance company) after the investigation is complete;
- Section IV provides a block for the FAA inspector to certify that he has witnessed unpacking, disassembly, inspection, or test of the part.

#### INSTRUCTION FOR COMPLETION

- 1. Check type of investigation;
- 2. Complete Section 1 (self-explanatory);
- Obtain owner or authorized representative's signature, phone number and address under Section II;
- 4. Complete Section III for "release" of aircraft.

Upon receipt of aircraft part Section II A:

- 1. Check box A, "Release of Aircraft Part."
- Check box indicating owner's requested disposition of aircraft part, box 1 or 2;
- When the aircraft part is to be shipped to the manufacturer or repair facility for disassembly, check "NOTICE" block in Section IV at bottom of form

When an aircraft part is released to the owner:

- Obtain owner's or his authorized representative's signature and address (Section II A);
- Check box, Section II B, "Receipt for Aircraft Part Returned by FAA" and obtain owner or authorized representative's signature.

After the FAA Inspector has witnessed disassembly, inspection, or test of the aircraft part, he will sign at the bottom of the "hard" copy (Section IV).

#### ROUTING

Original - given to owner or authorized person

Copy - retained by the issuing FAA inspector

"Hard Copy" - attached to the aircraft/par

### c. FAA Form 8020-23, FAA Accident/Incident Report

e	FAA ACCIDENT / INCIDENT REPORT					2.	AM	ſEND	ED DA	ΔTE		MO			DA		Y	R	$\Box$					
1.							13. AIRCRAFT 14. FAR PART NUMBER																	
						╡┍		1		REGISTRATION 91 133 103 135 ON DEMA								N DEMAND						
		L					MAKE/MODEL											105			OMMUTER			
3.	DATE OF EVENT		MC	<u> </u>	DA		YR SERIAL NO.										-		121	$\dashv$				
										YF	AR OF	MAN	JFACTU	URE			Т		_	129			OD A DT	
4.	FAA OFFICE	REG	GION	e .	0	FICE NU	MBER.				AL AIRFI		RS.				Ť	╡	15.				CRAFT	
										~	IOLE HOU						4	ᆗ		AIRPI				
5.	NTSB ID										IAL AIRFI IOLE HOU		RS.							HELD		SR.		
6.	LOCATION-CITY/STATE	ZIP								<u> </u>		· ·	T MAKE	/MO	DEL/S	ERIES	;	-		GLID				
											(IF APPI	ICABL	.E)							BALL	.00N			
7.	OPERATOR NAME								1	17	PROPEI	LERM	AKE/M	ODE	L/SER	IES		$\neg$		DIRIC	IBLE			
						FOURLE	7769 10	ENTER	50		(IF APPI									GYRC	)PLA1	NE.		
8.	AIRPORT					- TOOK LE	TIEKID		1	キ—			-				_	_		HOME	BUILD	AMAT	EUR/EXP.	
	(IF APPLICABLE)	3	3-OR	4-LET	TER ID					18.	BIOHAZ	LARD A	REA	Y	ES	NO				ULTR	ALIG	HT		
9.	LOCAL TIME		24 H	IOUR	CLOCK				]	19.			DING GI	EAR										
10A.	LATITUDE								1		CONVE		AL			+	_	SKIS	HIBIO	TIS				
.04										$\vdash$	FLOAT						+	antr'i						
10B.	LONGITUDE									20.	INJURY		(ARY					UNI	KNOV	WN				
												_	CREW	CAE	BIN CRE	WP	ASSE	NGER		OTHE	IR.		TOTAL	
11. /	AIRCRAFT DAMAGE	12. C	OLI	ISIO	N - BET	WEEN I	WO AI	RCRA	FT	NON	Œ													
	NONE	Y	ES [			AIR				MIN														
	MINOR.	N	οĺ	T		GROU	JND	$\overline{\square}$			IOUS								$\perp$			$\vdash$		
	SUBSTANTIAL	REGIS	TRA	TION	NUMBE					FAT.									$\rightarrow$			⊢		
	DESTROYED	SECO	ND A	IRCR	AFT					TOT	AL													
	FACTORS - IDENTIFY PRIMA THECKING OF FACTORS IS THE OPIN										AS X.						2	2. T	YPE C	OF OP	ERA	TION	S	
21A.	TECHNICAI		_		on orvenar.	00201000	21 <b>B</b> .	5 IMPEST			ATIONA	L FAC	TORS				┦	PE	RSON/	AL				
	GEAR COLLAPSE				ER LAND	ING		FUEL D				1	SABOTA	AGE			┢	CO	COMMERCIAL					
	GEAR UP LANDING		-		FAILURE			PILOTI	NDUC	ED		1						CA	CARGO					
	FIRE OR EXPLOSION		CO	MPON	ENT FAIL	URE		GROUN	D CRE	w		+	PILOT INCP. ALCOHOL INSTRUCTION											
	FUEL CONTAMINATION		LOS	ST POV	VER			OTHER	THAN	PILO	т	1-					0	CORPORATE						
	BLADE/ROTOR FAILURE		FOI	D			1	PARAC	HUTE	INCID	ENT	1	CARBUT			_	╋	-	FERRY					
	DESIGN OF AIRCRAFT		AU.	TO IM	PROPER			OVER (	ROSS	WEIG	HT	-					+	AERIAL APPLICATION						
	METAL FATIGUE		CO	RROSI	ON			CGOU	OFL	MITS		1—	ENTERCENCY I ANDING				+							
	IMPROPER.		INF	LIGHT	FIRE		:	STRUC	K AND	MAL		1—	HARD LANDING				Ab	AMBULANCE						
	IMPROPER INSTALLATION		SM	OKE/F	UMES		· 1	BIRD S	TRIKE			1—						FIE	FIREFIGHTING					
	AD NON-COMPLIANCE		INF	LIGHT	BREAKU	æ	1	PAX DI	STURE	BANCE	1	1-						BA	BANNER TOW					
	DECOMPRESSION		IMP	ROPE	R PART		1	STOLE	N AIRC	RAFT		1-	UNDERSHOT RUNWAY					AB	AIR SHOW					
21F.	ATA CODE		OT	HER.			1	HUACS				1—						SIG	SIGHTSEEING					
21C.	PART NAME	21D. M	ANU	UFACI	URER		21E.	PART	NUMB	ER		1	STALL/S				-	SK	SKYDIVING					
23.	TECHNICAL FAC	TORS			24.		PRECIP	ITAT	ION			┥—	MISMANAGED GEAR					FA	FAR 141 PILOT SCHOOL					
	NOT APPLICABLE / NOT AVA				-1.	NOT AP				LABL	E	┥—				ROLS	┢	+	MILITARY					
L	NATIONAL WEATHER SERVI	CE				RAIN						]—	ABORTE			_	┢	+	REIGN					
	FLIGHT SERVICE STATION					HAIL						1	AIRFRA			ľ	┢	-	BLICU					
	PATWAS					SLEET						_	WAKE T		LENCE		╋	-		UBE				
⊢	VOICE RESP. SYSTEM					SNOW	IC DOIN					-	WEATH	ER					HER					
⊢	COMPANY COMMERCIAL WX. SERVICE				-	FREEZIN						26.			,	PHA	SE C	OF FI	IGH:	г				
	TV/RADIO WEATHER	-			-	DRIZZLS							GROUN	D		С	RUIS	SE			M	ANEU	VER.	
	MILITARY					OTHER							TAXI		T	D	ESC	ENT			H	OVER		
	COMPUTER BRIEFING												TAKEOR	FF		A	PPR(	OACH	H OTHER					
25.		1	TECHNICAL FACTORS							_	CLIMB		+	L	AND	ING		+	+					
⊢	NONE / NOT APPLICABLE HAZE				+	THUNDE		M				27	ACTUA		EATHE	-								
$\vdash$	DUST					TURBUL		WINDS	TORM			-	IMC	]	VMC		N	OT AP	PLIC.	ABLE				
	SMOKE					DENSIT						28	RUNW	AVO	OND	TIONS	5		NOT	T APPI	ICA	BLF	$\Box$	
	FOG					LIGHTN												T						
⊢	BLOWING DUST BLOWING SMOKE					BLOWIN WHITE (		I					DRY					-	SNC					
⊢	ICING CONDITIONS				+	WIND SE						┥	WET						SLU	JSH				
	GUSTY WINDS					OTHER							ICE					STA	ANDING	WAT	ER.			
EAA	Form 8020-23 (12-99)	0.110.00	DOD									_		-	-	70.611			_				2_00_923_10	

### c. FAA Form 8020-23 (continued)

29. GENERAL AVIATION ACCIDENTS ONLY		EVACUATION OVERVIEW			
DID PILOT ATTEND SAFETY SEMINAR OR CLINIC WITHIN PAST 3 YEARS?	30. (AIR CARRIER ONLY) EVACUATION EVACUATION INITIATED INJURIES				
DID PILOT PARTICIPATE IN WINGS PROGRAM WITHIN PAST 3 YEARS?	YES NO UNKN				
DID PILOT ATTEND ANY OTHER RECURRENT TRAINING WITHIN THE PAST 3 YEARS?	YES NO YES NO				
31. PILOT INFORMATION NOT APPLICABLE	CERTIFICATE TYPE	SECOND PILOT			
NAME	RECREATIONAL				
DATE OF BIRTH	STUDENT				
DATE HIRED (AIR CARRIER ONLY) MO DA YR		MO DA YR			
DOMICILE ZIP CODE	PRIVATE				
HOURS MAKE AND MODEL	COMMERCIAL				
HOURS LAST 90 DAYS	FLIGHT INST.				
TOTAL HOURS	ATP				
CERTIFICATE NO.					
REGULATORY CHECK RIDE MO DA YR	NON-PILOT	MO DA YR			
32. CORRECTIVE ACTION(S) PLANNED OR INITIATED NONE H4709 EXAN NARRATIVE (ATTACH ADDITI)	1 1	COUNSELING M or D OTHER			
CONDUCT OF I	NVESTIGATION				
34. NTSB PARTICIPATION ON-SCENE LIMITED 35. FAA PARTICIPATI		T ON-SCENE SCENE NOT ACCESSIBLE			
36. FAA INITIAL NOTIFICATION 37. FSDO NOT	OCAL TIME	FAA IIC ARRIVAL ON-SCENE DATE AND LOCAL TIME MO DA YR			
24 - HOUR CLOCK	24 - HOUR CLOCK	24 - HOUR CLOCE			
39. FAA HOURS USED FOR 40. 40.	TOTAL HOURS USED 41. 41.	TOTAL TRAVEL HOURS TO & FROM SCENE			
42. FAA NINE RESPONSIBILITIES IDENTIFICATION OF RESPONSIBILITIES IS THE INVESTIGATORS OFFICING BASED ON HIS HER INVESTIGATION					
1. FAA FACILITES     YES NO     NO     NO		SECURITY YES NO			
2. NON FAA FACILITIES YES NO 5. FAR CHANGE NEEDED	YES NO 8.	AIRMAN MEDICAL QUALIF. YES NO			
3. AIRWORTHINESS YES NO 6. AIRPORT CERTIFICATION	YES NO 9.	FAR VIOLATIONS YES NO			
43. BRIEF EXPLANATION OF ISSUES INVOLVED					
H. FAA IIC NAME         DATE           FAA Form 8020-23 (12-99)         SUPERSEDES FAA FORMS 8020-5 and 8020-16         INFOF	REGION MATION IS PRELIMINARY AND SU	DISTRICT OFFICE BJECT TO CHANGE NSN: 0052-00-923-1			

### d. FAA Form 8020-15, Investigation of Near Midair Collision Report

		Incident Report Number
INVESTIGATIO MIDAIR COLLI		N
items. "Rptg" refers to the aircraft that repor	ts the NMAC first; "Other" refers to the oth -21, "Preliminary Near Midair Collision	according to instructions on page 3. Complete all her aircraft. Use the same incident report number Report." Any corrections to FAA Form 8020-21
A. Date (Coordinated Universal Time - UTC) A. Pilot Nam M M D D Y Y Y Y B. UTC Time C. Local Time D. Nearest City or Town and State 	IFlight Time hrs.	3. Other Aircraft ("Other") Information (complete or mark box):         All information unknown         A. Pilot Name         First, middle, last         B. Pilot Total Flight Time         C. Pilot Time in Make and         D. Operator Name and         Full Name         Address         City       State         ZIP         5. Pilots' Certificates (mark appropriate box):         Rptg         All         Private         D.         I         Student         B.         I         Student         B.         I         Private         D.         I         Airline Transport         F.         Flight Instructor         G.         Hiltary         H.         I         Flight Instructor         G.         I         I         I         I         I         I         I         I         I         I         I
Other         Rptg Other         A.       Single Engine Land         B.       Multiengine Land         C.       Single Engine Sea         D.       Multiengine Sea         E.       Rotorcraft         F.       Gilder         G.       Lighter-than-air         H.       None         I.       Unknown         J.       Other, Specify	7. Pilots' Instrument Ratings (mark one per aircraft): Rptg Other A Current B Not Current C None D Unknown	K. <ul> <li>Other, Specify</li> <li>Second tion(s) During NMAC (mark appropriate boxes):</li> <li>A.</li> <li>Dawn</li> <li>G.</li> <li>Precipitation</li> <li>Bright Day</li> <li>H.</li> <li>Thunderstorm</li> <li>C.</li> <li>Glaring Sun</li> <li>I.</li> <li>Turbulence</li> <li>D.</li> <li>Dusk</li> <li>J.</li> <li>Haze</li> <li>E.</li> <li>Bright Night</li> <li>K.</li> <li>Fog</li> <li>F.</li> <li>Black Night</li> <li>L.</li> <li>Icing</li> <li>M.</li> <li>Unknown</li> </ul> <li>N.</li> <li>Other, Specify</li>
9. Weather During NMAC (mark one): A. Visual Meteorological Conditions B. Marginal VMC C. Instrument Meteorological Conditions D. Unknown E. Other, Specify	(mark one): A. □ Clear B. □ Scattered	<ul> <li>11. Visibility at Flight Altitude During NMAC in <ul> <li>Nautical or </li> <li>Statute Miles (mark one):</li> </ul> </li> <li>A. <ul> <li>Less than 1 Mile</li> <li>B. <ul> <li>1 to 3 Miles</li> <li>C. <ul> <li>More than 3, but less than 5 Miles</li> <li>D. <ul> <li>5 or More Miles</li> <li>E. <ul> <li>Unknown</li> </ul> </li> </ul></li></ul></li></ul></li></ul></li></ul>
FAA Form 8020-15 (3-02) Supersedes Previous Edition	Page 1	NSN: 0052-00-906-40

### d. FAA Form 8020-15, Investigation of Near Midair Collision Report (continued)

12.Indicated Airspeed Immediately Before NMAC:	13. Aircraft Orientation at Closest Proximity (mark appropriate	boxes to indicate position of apposing aircraft as viewed by pilots):
Before NMAC.	Pilot         Pilot         Pilot           A.          Above         F.            B.          Below         G.	her liot Head On Overtaking, Straight Behind Overtaking, Convergence Angle Unknown
14. Was There an Air Traffic Control (ATC) Operati (mark one):         A.       Yes, Specify Report No(s).         B.       No         C.       Unknown         16. Aircraft Equipment Malfunction(s) Contributed to NMAC (mark appropriate boxes):         Rptg       Other         A.       □         Communication         B.       □         C.       □         Navigation, Excluding Autopilot         D.       □         Autopilot         E.       □         Mineter         F.       □         Unknown         G.       □         Other, Specify         H.       □         None of the Above, Equipment Malfunction Not a Factor	Rptg         Other           A.          Pilot Recei           B.          Avoidance           C.          Flying Visu           D.          Unknown           E.          Other, Specific	(check appropriate boxes):         ved Inaccurate Weather Data         of Weather         ial Flight Rules (VFR) in Instrument Conditions         cify
19. Air Traffic Control (mark appropriate boxes) :         Rptg       Other         A. <ul> <li>Did Not Alert Pilot to Other Aircraft in Timely Manner</li> <li>B.</li> <li>Did Not Observe Aircraft</li> <li>C.</li> <li>Did Not Coordinate Properly Between Controllers</li> <li>D.</li> <li>Unknown</li> <li>E.</li> <li>Other, Specify</li> <li>F.</li> <li>None of the Above</li> <li>22. Corrections and Additions to FAA Form 8020-2</li> <li> </li></ul>	20. Was There a Pilot Deviation? (mark one per aircraft):  Rptg Other AYes, Specify Report No.(s).  P P P BNo COther, Specify 1 (specify item number and new information or mark box):	O.       None of the Above         21. Pilot Statements (check one per aircraft) :         Rptg       Other         A.       Received         B.       Requested, But Declined         C.       Requested, Not Received         D.       Not Requested         E.       Aircraft Unknown
FAA Form 8020-15 (3-02) Supersedes Previous Edition	on Page 2	NSN: 0052-00-906-400

d. FAA Form 8020-15, Investigation of Near Midair Collision Report (continued)

Incident Report Number
ed) N
· · · · · · · · · · · · · · · · · · ·
riteria): 25. Attachment(s): A.
B.      Others, Specify
Telephone No.
Г
28. Report Distributed to: A.
B. Others
JCTIONS The inspector completing the EAA Form 9020-15 is responsible
The inspector completing the FAA Form 8020-15 is responsible for ensuring that all information reported on FAA Form 8020-21 is complete and accurate. If any information on FAA Form 8020-21 is found to be incomplete or inaccurate, the inspector must provide additions or corrections to that information in Item 22. Complete all items. If the categories given are inadequate, complete "Other, Specify." If data for both the reporting and other aircraft appear under "Other, Specify," provide the reporting aircraft data first, followed by the other aircraft data. Provide comments in Item 23, not the margins. Sign and date the form (Item 27) before distribution.

### e. FAA Form 8020-18, Investigation of Pilot Deviation Report

	Incident Report Number					
INVESTIGATION OF						
PILOT DEVIATION REPORT						
Complete and distribute within 90 days of a reported pilot deviation according to instruction the same incident report number as on the corresponding FAA Form 8020-17, "Preliminary						
to FAA Form 8020-17 should be reported in item 17 of this form. Complete the form by ha						
1. Date, Time, and Location 2. Pilot Information:	3. Pilot Hours (if hours					
of Deviation: A. Name and Address	unavailable, estimate):					
A. Date (Coordinated Universal Time-UTC) Name (first, middle, last)	A. Total, All Aircraft					
	B. Total, Make & Model in					
M M D D Y Y Y Y Address	hours					
City State or Country ZIP	C. Last 90 Days, All Aircraft					
B. UIC Time B. Home Base	hours					
	D. Last 90 Days, Make & Model in Deviation					
C. Local Time	hours					
C. Telephone Number	E. Duty Time, Last 24 Hours					
	(includes item 3F)					
D. Pilot Certificate No. (or enter "MILITARY")	F. Flight Time, Last 24 Hours					
D. Nearest City or Town and State	hours					
E. Date of Birth	G. Flight Time, Leg At Time of Deviation					
MMDDYYYY						
<ol> <li>Pilot and Medical Certificate(s):</li> <li>A. Pilot Certificate(s) (mark appropriate boxes):</li> </ol>						
(1)     U Student     (5)     U Airline Transport     (9)     U None       (2)     □     Recreational     (6)     □     Flight Instructor     (10)     □     Unknow	'n					
	Specify					
(4) Commercial (8) Foreign Pilot						
B. Medical Certificate(s) (mark appropriate boxes):						
(1) First Class (4) Special Issuance, Specify Type (6) Out of [	Date					
(2) Second Class (7) Unknow						
(3) Third Class (5) Self Certification (8) None R	lequired, Specify Reason					
C. Date of Last Medical						
MMDDYYYY						
5. Pilot Rating(s) (mark appropriate boxes): (mark one):	<ol> <li>Prior Enforcement Actions Against Pilot (mark one):</li> </ol>					
A. L Single Engine Land F. L Glider						
B.  Multiengine Land G.  Lighter-than-air A.  Current C.  Single Engine Sea H.  None B.  Not Current	A. D One or More B. None					
D. D. Multiengine Sea I. Unknown C. D. None	C. 🔲 Unknown					
E. 🗌 Rotorcraft J. 🗌 Other, Specify D. 🖵 Unknown						
8. Date(s) of Pilot Checks and Tests (specify those within last two years, MM/DD/YYYY):						
A. Flight Review D. Simulator G. Airline Transport Pilot Fli	ight Test I. Other, Specify					
B. Proficiency E. Route Check H. Flight Test (private, com dight instruction)	mercial,					
E Instrument Currency or C. Competency Fight Instrument Asting Fight Test						
C. Competency Flight Instrument Rating Flight Test						
FAA Form 8020 18 /2 021 Supercodes Broulous Edition Barte 1	NSN: 0052 00 899 1001					

### e. FAA Form 8020-18, Investigation of Pilot Deviation Report (continued)

9. Aircraft Information: A. Registration (N) No.	10. Type of Operation at Time of Deviation (mark one): A. U.S. Air Carrier (14 CFR 121 or
B. Flight No. or Call Sign (if applicable)	B. Foreign Air Carrier (14 CFR 129)     C. Commuter (14 CFR 135)     D. Air Taxi (14 CFR 135)
C. Make D. Model	E. General Aviation (14 CFR 91) F. Public (governmental)
E. Aircraft Type (mark one):	G. U.S. Military, Specify Service H. Unknown
<ul> <li>(1) □ Single Engine Land</li> <li>(5) □ Rotorcraft</li> <li>(2) □ Multiengine Land</li> <li>(6) □ Other, Specify</li> </ul>	I.   Other, Specify
(3) ☐ Single Ēngine Sea (4) ☐ Multiengine Sea	
<ol> <li>Aircraft Operator Information (complete, or mark box if General Aviation):           General Aviation         A. Name and Address         </li> </ol>	12. Flight Information : A. Departure Airport ID
Full Name	B. Destination Airport ID
Address	
	C. Local Flight:
City State or Country	ZIP (1) [] Yes (2) [] No (3) [] Unknown
B. Telephone Number C. Certificate Nu	mber D. First Flight of Day for Pilot:
	(1) 🗌 Yes (2) 🗌 No (3) 🗍 Unknown
13. Weather Contributed to Pilot Deviation (mark appropriate boxes):	<ol> <li>Aircraft Equipment Malfunction(s) Contributed to Pilot Deviation (mark appropriate boxes):</li> </ol>
A. Pilot Received Inaccurate Weather Data	
B. Avoidance of Weather C. Flying Visual Flight Rules (VFR) in Instrument Conditions	B.  Transponder C.  Navigation, Excluding Autopilot
D. 🔲 Unknown	D.   Autopilot
E.  Other, Specify  F.  None of the Above, Weather Not a Factor	E.  Altimeter F.  Unknown
	G.
	H. D None of the Above, Equipment Malfunction Not a Factor
<ol> <li>Investigation Indicates the Pilot Lacked or Had Inadequate Knowledge or Experience With (mark appropriate boxes):</li> </ol>	<ol> <li>Investigation Indicates the Pilot Was (mark appropriate boxes):</li> </ol>
A.  Aircraft B.  Avionics	A. D Overworked B. D Distracted Specify
C.  ATC Procedures	C.  Fatigued
D. ATC Terminology and Phraseology	D. D. Actively Scanning
E.  English Language F.  Preflight Planning	E. □ Not Actively Scanning F. □ Unable to Locate Traffic, Even With Traffic Advisory
G. Crew Coordination	G. Disoriented or Lost
H. 🔲 Weather	H. 🔲 Sick, Specify
I. Airport J. Current Charts and Approach Plates	I. U Not Following ATC Instructions Specify J. D Operating in Class A, B, C, or D Airspace
K. Unknown	Without Required Communication or Authorization
L.  Other, Specify	<ul> <li>K.</li></ul>
M.  None of the Above	M. Unknown
	N. □ Other, Specify     O. □ None of the Above
17. Corrections and Additions to FAA Form 8020-17 (specify item number and new info	
FAA Form 8020-18 (3-02) Supersedes Previous Edition Page	e 2 NSN: 0052-00-899-100

### e. FAA Form 8020-18, Investigation of Pilot Deviation Report (continued)

	Incident Report Number
INVESTIGATION OF PILOT DEVIATION REPORT (Conti	nued) P
18. Description of Deviation and Comments with Recommendations, if any:	
19. Attachment(s) : A.  FAA Form 8020-17	<ol> <li>Related Reports</li> <li>A.          Enforcement Investigative Report (EIR, specify in Item 21)     </li> </ol>
B.  Other specify	B. D Other, Specify
	C. 🔲 No Related Reports
	) Cited in EIR (specify FAR Number[s], or mark E if no EIR):
A. LIN IIItiated, Specily No.	
C	
B. D No EIR Initiated D. L. E. D No	
23. Investigating Flight Standards Office:	
A. LA	Telephone Number
B ID (e.g., 25)	
24. Inspector Completing Form:	25. Report Distributed to:
A Simplur	A.
A. Signature	B. Others, Specify
B. Name Type or Print	
C. Date	
MMDDYYYY	
INSTRUCTIONS	
The FAA Form 8020-18 must be completed within 90 days of	The inspector completing the FAA Form 8020-18 is
the notification of a pilot deviation on FAA Form 8020-17, "Preliminary Pilot Deviation Report." The FAA Form 8020-18 must	responsible for ensuring that all information reported on FAA Form 8020-17 is complete and accurate. If any information on FAA
be assigned the same incident report number as the	Form 8020-17 is found to be incomplete or inaccurate, the
corresponding FAA Form 8020-17. Instructions on distribution of inspector must provide additions or corrections to that information FAA Form 8020-18 are in FAA Order 8020.11, "Aircraft Accident in item 17.	
and Incident Notification, Investigation, and Reporting."	Complete all items. If the categories given are inadequate, complete "Other, Specify." Provide any comments in item 18, not
the margins. Sign and date the form (Item 24) before distribution.	

### Part 2. Other Procedures

a. Example of Recommendation for Accident Prevention

Memorandum
Flight Standards District Office
286 SW 34 <sup>th</sup> Street
Fort Lauderdale, FL 33315

Subject: <u>ACTION</u>: Safety Recommendation, MD-88-88 Static Port Heaters and Associated Wing

From: Aviation Safety Inspector Attn. of: FSDO-62 Reply to

Date: February 10, 1988

To: Manager, AAI-200 THRU: Manager, KY FSDO 01

On September 17, 1999, a Delta Airlines, Inc aircraft N947DL, a MD-88-88 aircraft, experienced an in flight turn back for smoke and fumes in the cabin, Investigations revealed that the alternate static port heater, located on the right hand side of the fuselage aft of the #1 cargo bin door, had overheated and burnt the wiring insulation from the ground wire. The now exposed ground wire continued to heat causing the aircraft insulation and liner in the #1 cargo bin to smolder to near combustion.

Further investigations revealed that the circuit breaker for the static port heater did not trip, which allowed current to continue to flow to the heater. The circuit breaker was removed and checked for serviceability with no discrepancies noted.

Delta Airlines, Inc. has inspected 120 of it's 136 MD-88/90 aircraft with reports of thermal damage, ground arching, and electrical connector pins bent, burnt, and melted on at least 6 aircraft.

**Recommendation:** The Seattle Aircraft Certificate Office should issue an Airworthiness Directive directing air carriers operating the MD-80, MD-90, and DC-9 aircraft to inspect each static port heater's thermal switch connectors, wiring and grounds to ascertain condition. The inspection should consist of a visual inspection of the electrical connector for signs of arching, heat damage, or exposed wiring and for proper continuity. To conclude the inspection direct the removal of the maylar insulation from around each static port heater and replace with tedlar insulation.

As an interim measure each Principal Maintenance Inspector (PMI) of air carriers operating MD-80, MD-90, and DC-9 aircraft should request each carrier to inspect their aircraft to ascertain the condition of the static port heaters and wiring and repair as necessary.

## Keith D. DeBerry

Keith D. DeBerry



b. Accident and Incident Investigation Process for Flight Standards



## Appendix 3. NTSB Regulations

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## Table of Contents

Part 1. 49 CFR 800 Appendix, Request to The Secretary of The Department of Transportation to Investigate Certain Aircraft Accidents	A-2
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	A-3
Part 3. 49 CFR 831, Accident/Incident Investigation Procedures	A-6
Part 4. 49 CFR 845, Rules of Practice in Transportation: Accident/Incident Hearings and Reports	A-9

### **Appendix 3. NTSB Regulations**

## PART 1. 49 CFR 800 APPENDIX, REQUEST TO THE SECRETARY OF THE DEPARTMENT OF TRANSPORTATION TO INVESTIGATE 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 fixedwing 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 (Amended June 21, 1989)

PART 830 -- NOTIFICATION AND REPORTING OF AIR-CRAFT ACCIDENTS OR INCIDENTS AND OVERDUE AIRCRAFT, AND PRESERVA-TION OF AIRCRAFT WRECK-AGE, MAIL, CARGO, AND RECORDS.

#### Subpart A--General

Sec. 830.1 Applicability 830.2 Definitions

#### 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 statement to be filed.

AUTHORITY: Federal Aviation Act of 1958, as amended (49 U.S.C. 40101 *et seq.*), and the Independent Safety Board Act of 1974, as amended (49 U.S.C. 1101 *et seq.*).

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 and 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.

*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 governmentowned 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 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 Engine failure or component. 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.

[53 FR 36982, Sept. 23, 1988, as amended at 60 FR 40112, Aug. 7, 1995]

#### 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 (Board), field office<sup>1</sup> when: (a) An aircraft accident or any of

the following listed incidents occur: (1) Flight control system mal-

function or failure;

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

(3) Failure of structural components of a turbine engine excluding compressor and turbine blades and vanes;

(4) In-flight fire; or

(5) Aircraft collide 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 elec-trical systems which requires the sustained use of an emergency bus powered by a backup 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 evacuationof an aircraft in which anemergency egress system is utilized.(b) An aircraft is overdue and isbelieved to have been involved in anaccident.

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

## § 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.

<sup>&</sup>lt;sup>1</sup> The Board field offices are listed under U.S. Government in the telephone directories of the following cities: Anchorage, AK; Atlanta, GA.; West Chicago, IL.; Denver, CO; Arlington, TX.; Kansas City, MO; Gardena (Los Angeles), CA.; Miami, FL; Parsippany, NJ (metropolitan New York, NY); Seattle, WA; and Washington, DC.

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 3147-001)<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 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 hum. 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>&</sup>lt;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 (Effective June 3, 1988)

#### Part 831--ACCIDENT/INCIDENT INVESTIGATION PROCEDURES

Sec.	
831.1	Applicability of part.
831.2	Responsibility of Board.
831.3	Authority of Directors.
831.4	Nature of investigation.
831.5	Priority of Board investigation.
831.6	Request to withhold information.
831.7	Right of representation.
831.8	Investigator-in-charge.
831.9	Authority of Board representatives.
831.10	Autopsies.
831.11	Parties to the investigation
831.12	Access to and release of wreckage, records, mail, and cargo.
831.13	Flow and dissemination of accident or incident information.
831.14	Proposed findings.

AUTHORITY: Independent Safety Board Act of 1974, as amended (49 U.S.C. 1101 *et seq.*); Federal Aviation Act of 1958, as amended (49 U.S.C. 40101 *et seq.*)

SOURCE: 53 FR 15847, May 4, 1988, unless otherwise noted.

#### § 831.1 Applicability of part.

Unless otherwise specifically ordered by the National Transportation Safety Board (Board), the provisions of this part shall govern all accident or incident investigations, conducted under the authority of Title VII of the Federal Aviation Act of 1958, as amended, and the Independent Safety Board Act of 1974. Rules applicable to accident hearings and reports are set forth in Part 845.

#### § 831.2 Responsibility of Board. (a) Aviation

(1) The Board is responsible for the organization, conduct, and control of all accident and incident investigations (see §830.2 of this chapter) within the United States, its territories and possessions, where the accident or incident involves any civil aircraft or certain public aircraft (as specified in §830.5 of this chapter), including an investigation involving civil or public aircraft (as specified in §830.5) on the one hand, and an Armed Forces or intelligence agency aircraft on the other hand. It is also responsible for investigating accidents/incidents that occur outside the United States, and which involve civil aircraft and/or certain public aircraft, when the accident/incident is not in the territory of another country (*i.e.*, in international waters).

(2) Certain aviation field investigations are conducted by the Federal Aviation Administration (FAA), pursuant to a "Request to the Secretary of the Department of Transportation to Investigate Certain Aircraft Accidents," effective February 10, 1977 (the text of the request is contained in the appendix to Part 800 of this chapter), but the Board determines the probable cause of such accidents or inci-dents.<sup>1</sup> Under no circumstances are aviation investigations where the portion of the investigation is so delegated to the FAA by the Board considered to be joint investigations in the sense of sharing responsibility These investigations remain NTSB investigations.

(b) Surface. The Board is responsible for the investigation of railroad accidents in which there is a fatality, substantial property damage, or which involve a passenger train (see Part 840 of this Chapter); major marine casualties and marine accidents involving a public and nonpublic vessel or involving Coast Guard functions (see Part 850 of this Chapter); highway accidents, including railroad grade-crossing accidents which it selects in cooperation with the States; and pipeline accidents in which there is a fatality or substantial property damage.

(c) Other Accidents/Incidents. The Board is also responsible for the investigation of an accident/ incident that occurs in connection with the transportation of people or property which, in the judgment of the Board, is catastrophic, involves problems of a recurring character, or would otherwise carry out the policy of the Independent Safety Board Act of 1974. This authority includes, but is not limited to, marine and boating accidents and incidents not covered by Part 850 of this chapter, and accidents/incidents selected by the Board involving transportation and/or release of hazardous materials.

[62 FR 3806, Jan. 27, 1997]

#### § 831.3 Authority of Directors.

The Director, Office of Aviation Safety, or the Director, Office of Surface Transportation Safety, subject to the provisions of §831.2 and Part 800 of this chapter, may order an investigation into any accident or incident.

#### [62 FR 3806, Jan. 27, 1997]

#### § 831.4 Nature of investigation.

Accident and incident investigations are conducted by the Board to determine the facts, conditions, and circumstances relating to an accident or incident and the probable cause(s) thereof. These results are then used to ascertain measures that would best tend to prevent similar accidents or incidents in the future. The investigation includes the field investigation (on-scene at the accident, testing, teardown, etc.), report preparation, and, ordered, a public hearing. where The investigation results in Board conclusions issued in the form of a report or "brief" of the incident or accident. Accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties. They are not subject to the provisions of the Administrative Procedure Act (5 U.S.C. 504 et seq.), and are not conducted for the purpose of determining the rights or liabilities of any person.

[62 FR 3806, Jan. 27, 1997]

## § 831.5 Priority of Board investigations.

Any investigation of an accident or incident conducted by the Safety Board directly or pursuant to the appendix to Part 800 of this chapter (except major marine investigations conducted under 49 U.S.C. 1131(a)(1)(E)) has priority over all other investigations of such accident or incident conducted by other Federal agencies. The Safety Board shall provide for the appropriate participation by other Federal agencies in any such investigation, except that such agencies may not participate in the Safety Board's determination of the probable cause of the accident or Nothing in this section incident. impairs the authority of other Federal

<sup>&</sup>lt;sup>1</sup> The authority of a representative of the FAA during such investigations is the same as that of a Board investigator under this part.

agencies to conduct investigations of an accident or incident under applicable provisions of law or to obtain information directly from parties involved in, and witnesses to, the transportation accident or incident, provided they do so without interfering with the Safety Board's investigation. The Safety Board and other Federal agencies shall assure that appropriate information obtained or developed in the course of their investigations is exchanged in a timely manner.

[62 FR 3807, Jan. 27, 1997]

## § 831.6 Request to withhold information.

(a) Trade Secrets Act (18 U.S.C. 1905), Exemption 4 of the Freedom of Information Act (5 U.S.C. 552) (FOIA), and The Independent Safety Board Act of 1974, as amended.

(1) General. The Trade Secrets Act provides criminal penalties for unauthorized government disclosure of trade secrets and other specified confidential commercial information. The Freedom of Information Act authorizes withholding of such information; however, the Independent Safety Board Act, at 49 U.S.C. 1114(b), provides that the Board may, under certain circumstances disclose information related to trade secrets.

Procedures. (2)Information submitted to the Board that the submitter believes qualifies as a trade secret or confidential commercial information subject either to the Trade Secrets Act or FOIA Exemption 4 shall be so identified by the submitter on each and every page of such document. The Board shall give the submitter of any information so identified, or information the Board has substantial reason to believe qualifies as a trade secret or confidential commercial information subject either to the Trade Secrets Act or FOIA Exemption 4, the opportunity to comment on any contemplated disclosure, pursuant to 49 U.S.C. 1114(b). In all instances where the Board determines to disclose pursuant to 49 U.S.C. 1114(b) and/or 5 U.S.C. 552, at least 10 days' notice will be provided the submitter. Notice may not be provided the submitter when disclosure is required by a law other than FOIA if the information is not identified by the submitter as qualifying for withholding, as is required by this paragraph, unless the Board has substantial reason to believe that disclosure would result in competitive harm.

(3) Voluntarily-provided Safety Information. It is the policy of the Safety Board that commercial, safetyrelated information pro-

vided to it voluntarily and not in the context of particular accident/ incident investigations will not be disclosed. Reference to such information for the purposes of safety recommendations will be under-taken with consideration for the confidential nature of the underlying database(s).

b. Other. Any person may make written objection to the public disclosure of any other information contained in any report or document filed, or otherwise obtained by the Board, stating the grounds for such objection. The Board, 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 Freedom of Information Act (5 U.S.C. 552. see part 801 of this chapter), and its release is found not to be in the public interest.

[62 FR 3807, Jan. 27, 1997]

#### § 831.7 Right to representation.

Any person interrogated by an authorized representative of the Board during the investigation, regardless of the form of the interview (sworn, unsworn, transcribed, not transcribed, etc.), has the right to be accompanied, represented, or advised by an attorney or non-attorney representative.

#### 831.8 Investigator-in-charge.

The designated investigator-incharge organizes, conducts, controls, and manages the field phase of the investigation, regardless of whether a Board Member is also on-scene at the accident or incident site. (The role of the Board member at the scene of an accident investigation is as the official spokes-person for the Safety Board.) The IIC has the responsibility and authority to supervise and coordinate all resources and activities of all personnel, both Board and non-Board, involved in the on-site investigation. The IIC continues to have considerable organizational and management responsibilities throughout later phases of the investigation, up to and including

Board consideration and adoption of a report or brief of probable cause(s).

[62 FR 3807, Jan. 27, 1997]

## § 831.9 Authority of Board representatives.

(a) General. Any employee of the Board, upon presenting appropriate credentials, is authorized to enter any property where an accident/incident subject to the Board's jurisdiction has occurred, or wreckage from any such accident/ incident is located, and do all things considered necessary for proper investigation. Further, upon demand of an authorized representative of the Board and presentation of credentials, any Government agency, or person having possession or control of any transportation vehicle or component thereof, any facility, equipment, process or controls relevant to the investigation, or any pertinent records or memoranda, including all files, hospital records, and correspondence then or thereafter existing, and kept or required to be kept, shall forthwith permit inspection, photographing, or copying thereof by such authorized representative for the purpose of investigating an accident or incident, or preparing a study, or related to any special investigation pertaining to safety or the prevention of accidents. The Safety Board may issue a subpoena, enforceable in Federal district court, to obtain testimony or other evidence. Authorized representatives of the Board may question any person having knowledge relevant to an accident/incident, study, or special Authorized investigation. representatives of the Board also have exclusive authority, on behalf of the Board, to decide the way in which any testing will be conducted, including decisions on the person that will conduct the test, the type of test that will be conducted, and any individual who will witness the test.

(b) Aviation. Any employee of the Board upon presenting appropriate credentials, is authorized to examine and test to the extent necessary any civil or public air-craft (as specified in §830.5), aircraft engine, propeller, appliance, or property aboard such aircraft involved in an accident in air commerce.

(c) *Surface*. (1) Any employee of the Board, upon presenting appropriate credentials, is authorized to test or examine any vehicle, vessel, rolling stock, track, pipeline component, or any part of any such item when such examination or testing is determined to be required for purposes of such investigation.

(2) Any examination or testing shall be conducted in such a manner so as not to interfere with or obstruct unnecessarily the transportation services provided by the owner or operator of such vehicle, vessel, rolling stock, track, or pipe-line component, and shall be con-ducted in such a manner so as to preserve, to the maximum extent feasible, any evidence relating to the transportation accident, consistent with the needs of the investigation and with the cooperation of such owner or operator.

[53 FR 15847, May 4, 1988, as amended at 60 FR 40113, Aug. 7, 1995; 62 FR 3807, Jan. 27, 1997]

#### § 831.10 Autopsies.

The Board is authorized to obtain, with or without reimbursement, a copy of the report of autopsy performed by State or local officials on any person who dies as a result of having been involved in a transportation accident within the jurisdiction of the Board. The investigator-in-charge, on behalf of the Board, may order an autopsy or seek other tests of such persons as may be necessary to the investigation, provided that to the extent consistent with the needs of the accident investigation, provisions of local law protecting religious beliefs with respect to autopsies shall be observed.

## § 831.11 Parties to the investigation.

(a) All investigations, regardless of mode.

The investigator-in-(1)charge designates parties to participate in the investigation. Parties shall be limited to those persons, government agencies, companies, and associations whose employees, functions, activities, or products were involved in the accident or incident and who can provide suitable qualified technical personnel actively to assist in the investigation. Other than the FAA in aviation cases, no other entity is afforded the right to participate in Board investigations.

(2) Participants in the investigation (*i.e.*, party representatives, party coordinators, and/or the larger party organization) shall be responsive to the direction of Board representatives and may lose party status if they do not comply with their assigned duties, actively proscriptions or instructions, or if they conduct themselves in a manner prejudicial to the investigation.

(3) No party to the investigation shall be represented in any aspect of the NTSB investigation by any person who also represents claimants or insurers. No party representative may occupy a legal position (see §845.13 of this chapter). Failure to comply with these provisions may result in sanctions, including loss of status as a party.

(4) Title 49, United States Code §1132 provides for the appropriate participation of the FAA in Board investigations, and §1131 (a)(2) provides for such participation by other departments, agencies, or instrumentalities. The FAA and those other entities that meet the requirements of paragraph (a)(1) of this section will be parties to the investigation with the same rights and privileges and subject to the same limitations as other parties, provided however that representatives of the FAA need not sign the "Statement of Party Representatives to NTSB Investigation" (see paragraph (b) of this section).

(b) Aviation investigations. In addition to compliance with the provisions of paragraph (a) of this section, and to assist in ensuring complete understanding of the requirements and limitations of party status, all party representatives in aviation investigations shall sign "Statement of Party Representatives to NTSB Investigation" immediately upon attaining party representative status. Failure timely to sign that statement may result in sanctions, including loss of status as a party. [62 FR 3808, Jan. 27, 1997]

#### § 831.12 Access to and release of wreckage, records, mail, and cargo.

(a) Only the Board's accident investigation personnel, and persons authorized by the investigator-incharge to participate in any particular investigation, examination or testing shall be permitted access to wreckage, records, mail, or cargo in the Board's custody.

(b) Wreckage, records, mail, and cargo in the Board's custody shall be released by an authorized representative of the Board when it is determined that the Board has no further need of such wreckage, mail, cargo, or records. When such material is released, Form 6120.15, "Release of Wreckage," will be completed, acknowledging receipt.

#### § 831.13 Flow and dissemination of accident or incident information.

(a) Release of information during the field investigation, particularly at the accident scene, shall be limited to factual developments, and shall be made only through the Board Member present at the accident scene, the representative of the Board's Office of Public Affairs, or the investigator-in-charge.

All information concerning (b) the accident or incident obtained by any person or organization participating in the investigation shall be passed to the IIC through appropriate channels before being provided to any individual outside the investigation. Parties to the investigation may relay to their respective organizations information necessary for purposes of prevention or remedial action. However, no information concerning the accident or incident may be released to any person not a party representative to the investigation (including non-party representative employees of the party organization) before initial release by the Safety Board without prior consultation and approval of the IIC.

[53 FR 15847, May 4, 1988, as amended at 62 FR 3808, Jan. 27, 1997]

#### § 831.14 Proposed findings.

(a) *General.* Any person, government agency, company, or association whose employees, functions, activities, or products were involved in an accident or incident under investigation may submit to the Board 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 designed to prevent future accidents.

(b) *Timing of submissions.* To be considered, these submissions must be received before the matter is calendared for consideration at a Board meeting. All written submissions are expected to have been

### 02/02/2010

presented to staff in advance of the formal scheduling of the meeting. This procedure ensures orderly and thorough consideration of all views.

(c) *Exception*. This limitation does not apply to safety enforcement cases handled by the Board pursuant to Part 821 of this chapter. Separate *ex parte* rules, at Part 821, subpart J, apply to those proceedings.[62 FR 3808, Jan. 27, 1997]

#### PART 845--RULES OF PRACTICE IN TRANSPORTATION: ACCI-DENT/ INCIDENT HEARINGS AND REPORTS

Sec.

- 845.1 Applicability
- 845.2 Nature of hearing.

#### 845.3 Sessions open to the public.

#### Subpart A--Initial Procedure

- 845.10 Determination to hold hearing
- 845.11 Board of inquiry.845.12 Notice of hearing.
- 845.12 Notice of nearing. 845.13 Designation of par

845.13	Designation of parties.
Subpart BConduct of Hearing	
845.20	Powers of chairman of board of
045 01	inquiry.

845.21	Hearing officer.
845.22	Technical panel.
845.23	Prehearing conference.
845.24	Right of representation.

- 845.25 Examination of witnesses.
- 845.26 Evidence.
- 845.27 Proposed findings.

845 40

- 845.28 Stenographic transcripts 845.29 Payment of witnesses.
  - Subpart C--Board Reports

#### Agaidant report

045.40	riceident report.
845.41	Petitions for reconsideration
	or modification.

#### Subpart D--Public Record

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845.50 Public docket.845.51 Investigation to remain open.
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AUTHORITY: Title VII, Federal Aviation Act of 1958, as amended (49 U.S.C. 1441 *et seq.*); and the Independent Safety Board Act of 1974, Pub. L. 93-633, 88 Stat. 2166 (49 U.S.C. 1901 *et seq.*).

#### § 845.1 Applicability.

Unless otherwise specifically ordered by the National Transportation Safety Board (Board), the provisions of this part shall govern all transportation accident investigation hearings conducted under the authority of section 304(b) of the Independent Safety Board Act of 1974 (49 U.S.C. 1903(b) and accident reports issued by the Board.

#### § 845.2 Nature of hearing.

Transportation accident hearings are convened to assist the Board in determining cause or probable cause of an accident, in reporting the facts, conditions, and circumstances of the accident, and in ascertaining measures which will tend to prevent accidents and promote transportation safety. Such hearings are factfinding proceedings with no formal issues and no adverse parties and are not subject to the provisions of the Administrative Procedure Act (Pub. L. 89-554, 80 Stat. 384 (5 U.S.C. 554)).

[44 FR 34419, June 14, 1979; 44 FR 39181, July 5, 1979]

#### § 845.3 Sessions open to public.

(a) All hearings shall normally be open to the public (subject to the provision that any person present shall not be allowed at any time to interfere with the proper and orderly functioning of the board of inquiry).

(b) Sessions shall not be open to the public when evidence of a classified nature or which affects national security is to be received.

#### Subpart A--Initial Procedure

## § 845.10 Determination to hold hearing.

The Board may order a public hearing as part of an accident investigation whenever such hearing is deemed necessary in the public interest: *Provided* that if a quorum of the Board is not immediately available in the event of a catastrophic accident, the determination to hold a public hearing may be made by the Chairman of the Board.

#### § 845.11 Board of inquiry.

The board of inquiry shall consist of a Member of the Board who shall be chairman of the board of inquiry, and such other employees as may be designated by the chairman of the board of inquiry. Assignment of a Member to serve as the chairman of each board of inquiry shall be determined by the Board. The board of inquiry shall examine witnesses and secure, in the form of a public record, all known facts pertaining to the accident or incident and surrounding circumstances and conditions from which cause or probable cause may be determined and recommendations for corrective action may be formulated.

#### [49 FR 32853, Aug. 17, 1984]

#### § 845.12 Notice of hearing.

The chairman of the board of inquiry shall designate a time and place for the hearing which meets the needs of the Board. Notice to all

### 8020.11C Appendix 3

known interested persons shall be given.

#### § 845.13 Designation of parties.

(a) The chairman of the board of inquiry shall designate as parties to the hearing those persons, agencies, companies, and associations whose participation in the hearing is deemed necessary in the public interest and whose special knowledge will contribute to the development of pertinent evidence. Parties shall be represented by suitable qualified technical employees or members who do not occupy legal positions.

(b) No party shall be represented by any person who also represents claimants or insurers. Failure to comply with this provision shall result in loss of status as a party.

[44 FR 34419, June 14, 1979, as amended at 41 FR 7278, Mar. 3, 1986]

#### Subpart B--Conduct of Hearing

## § 845.20 Powers of chairman of board of inquiry.

The chairman of the board of inquiry, or his designee, shall have the following powers:

(a) To designate parties to the hearing and revoke such designations;(b) To open, continue, or adjourn the hearing;

(c) To determine the admissibility of and to receive evidence and to regulate the course of the hearing;

(d) To dispose of procedural requests or similar matters; and

(e) To take any other action necessary or incident to the orderly conduct of the hearing.

[44 FR 34419, June 14, 1979; 44 FR 39181, July 5, 1979]

#### § 845.21 Hearing officer.

The hearing officer, upon designation by the Chairman of the Board, shall have the following powers:

(a) To give notice concerning the time and place of hearing;

(b) To administer oaths and affirmations to witnesses; and

(c) To issue subpoenas requiring the attendance and testimony of witnesses and production of documents.

#### § 845.22 Technical panel.

The Director, Bureau of Accident Investigation, or the Director, Bureau of Field Operations, shall designate members of the Board's technical staff to participate in the hearing and initially develop the testimony of witnesses

#### [49 FR 32853, Aug. 17, 1984]

#### § 845.23 Prehearing conference.

(a) Except as provided in paragraph (d) of this section for expedited hearings, the chairman of the board of inquiry shall hold a prehearing conference with the par-ties to the hearing at a convenient time and place prior to the hearing. At such prehearing conference, the parties shall be advised of the witnesses to be called at the hearing, the areas in which they will be examined, and the exhibits which will be offered in evidence.

(b) Parties shall submit at the prehearing conference copies of any additional documentary exhibits they desire to offer. (Copies of all exhibits proposed for admission by the board of inquiry and the parties shall be furnished to the board of inquiry and to all parties, insofar as available at that time.)

(c) A party who, at the time of the prehearing conference, fails to advise the chairman of the board of inquiry of additional exhibits he intends to submit, or additional witnesses he desires to examine, shall be precluded from introducing such evidence unless the chairman of the board of inquiry determines for good cause shown that such evidence should be admitted.

(d) *Expedited hearings*. When time permits, the chairman of the board of inquiry may hold a prehearing conference. In the event that an expedited hearing is held, the requirements in paragraphs (b) and (c) of this section concerning the identification of witnesses, exhibits or other evidence may be waived by the chairman of the board of inquiry.

#### § 845.24 Right of representation.

Any person who appears to testify at a public hearing shall be accorded the right to be accompanied, represented, or advised by counsel or by any other duly qualified representative.

## § 845.25 Examination of witnesses.

(a) Witnesses shall be initially examined by the board of inquiry or its technical panel. Following such examination, parties to the hearing shall be given the opportunity to examine such witnesses. (b) Materiality, relevancy, and competency of witness testimony, exhibits, or physical evidence shall not be the subject of objections in the legal sense by a party to the hearing or any other person. Such matters shall be controlled by rulings of the chairman of the board of inquiry on his own motion. If the examination of a witness by a party is interrupted by a ruling of the chairman of the board of inquiry, opportunity shall be given to show materiality, relevancy, or competency of the testimony or evidence sought to be elicited from the witness.

#### § 845.26 Evidence.

The chairman of the board of inquiry shall receive all testimony and evidence which may be of aid in determining the cause of accident. He may exclude any testimony or exhibits which are not pertinent to the investigation or are merely cumulative.

#### § 845.27 Proposed findings.

Any party may submit proposed findings to be drawn from the testimony and exhibits, a proposed probable cause, and proposed safety recommendations designed to pre-vent future accidents. The proposals shall be submitted within the time specified by the presiding officer at the close of the hearing, and shall be made a part of the public docket. Parties to the hearing shall serve copies of their proposals on all other parties to the hearing.

## § 845.28 Stenographic transcript.

A verbatim report of the hearing shall be taken. Copies of the transcript may be obtained by any interested person from the Board or from the court reporting firm preparing the transcript upon payment of the fees fixed therefore. (See Part 801, Appendix-Fee Schedule.)

#### § 845.29 Payment of witnesses.

Any witness subpoenaed to attend the hearing under this part shall be paid such fees for his travel and attendance as shall be certified by the hearing officer.

#### Subpart C--Board Reports

#### § 845.40 Accident report.

(a) The Board will issue a detailed narrative accident report in connection with the investigation into those accidents which the Board determines to warrant such a report. The report will set forth the facts, conditions and circumstances relating to the accident and the probable cause thereof, along with any appropriate recommendations formulated on the basis of the investigation.

(b) The probable cause and facts, conditions, and circumstances of all other accidents will be reported in a manner and form prescribed by the Board.

#### § 845.41 Petitions for reconsideration or modification.

(a) Petitions for reconsideration or modification of the Board's findings and determination of probable cause filed by a party to an investigation or hearing or other person having a direct interest in the accident investigation will be entertained only if based on the discovery of new evidence or on a showing that the Board's findings are erroneous. The petitions shall be in Petitions which are writing. repetitious of proposed findings submitted pursuant to §845.27, or of positions previously advanced, and petitions filed by a party to the hearing who failed to submit proposed findings pursuant to §845.27 will not be entertained. Petitions based on the discovery of new matter shall: identify the new matter; contain affidavits of prospective witnesses, authenticated documents, or both, or an explanation of why such substantiation is unavailable; and state why the new matter was not available prior to Board's adoption of its findings. Petitions based on a claim of erroneous findings shall set forth in detail the grounds relied upon.

(b) When a petition for reconsideration or modification is filed with the Board, copies of the petition and any supporting documentation shall be served on all other parties to the investigation or hearing and proof of service shall be attached to the petition. The other parties may file comments no later than 90 days after service of the petition.

(c) Oral presentation before the Board normally will not form a part of proceedings under this part. However, the Board may permit oral presentation where a party or interested person makes an affirmative showing that the written petition for reconsideration or modification is an insufficient means to present the party's or person's position to the Board. Where oral presentation is allowed, the Board will specify the issues to be addressed and all parties to the investigation or hearing will be given notice and the opportunity to participate.

[48 FR 52740, Nov. 22, 1983]

#### Subpart D--Public Record

#### § 845.50 Public docket.

(a) The public docket shall include all factual information concerning the accident. Proposed findings submitted pursuant to §831.12 or §845.27 and petitions for reconsideration and modification submitted pursuant to §845.41, comments thereon by other parties, and the Board's rulings, shall also be placed in the public docket.

(b) The docket shall be established as soon as practicable following the accident, and material shall be added thereto as it becomes available. Where a hearing is held, the exhibits will be introduced into the record at the hearing.

(c) A copy of the docket shall be made available to any person for review at the Washington office of the Board. Copies of the material in the docket may be obtained, upon payment of the cost of reproduction, from the Public Inquiries Section, Bureau of Administration, National Transportation Safety Board, Washington, DC 20594.

[44 FR 34419, June 14, 1979, as amended at 48 FR 52740, Nov. 22, 1983]

## § 845.51 Investigation to remain open.

Accident investigations are never officially closed but are kept open for the submission of new and pertinent evidence by any interested person. If the Board finds that such evidence is relevant and probative, it shall be made a part of the docket and, where appropriate, parties will be given an opportunity to examine such evidence and to comment thereon.