



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

Air Traffic Organization Policy

**ORDER
JO 1030.3**

Effective Date:
November 13, 2009

SUBJ: Initial Event Response

This order prescribes Federal Aviation Administration (FAA) Air Traffic Organization (ATO) procedures and responsibilities in response to events (for example, aircraft accidents, major service disruptions) that necessitate an event review and reporting to the Chief Operating Officer (COO). This order specifies ATO policy for investigating events where ATO involvement could be a factor. Regardless of other investigations or assessments conducted by organizations outside the ATO, it is important that the ATO proceed with its own fact finding at every level to provide transparency of its operation of the National Airspace System (NAS). It provides direction and guidance to ATO service units, Service Areas, Service Centers, offices that deal with the dissemination of information following an event, and facilities that are called upon to assist in event reviews following such events. The ATO, through the processes in this order, will ensure that the facts surrounding all events are adequately compiled and reported in a most expeditious manner to the COO and the Senior Vice President of Operations.

The mission to improve the safety and efficiency of the NAS is never complete. All concerned personnel must familiarize themselves with the provisions of this order related to their operational responsibilities and use their best judgment if they encounter situations not specifically described in the order.

A handwritten signature in black ink, appearing to read "Henry P. Krakowski", is positioned above the printed name.

Henry P. Krakowski
Chief Operating Officer
Air Traffic Organization

Table of Contents

Chapter 1. General Information

Paragraph	Page
1-1. PURPOSE	1-1
1-2. AUDIENCE.....	1-1
1-3. WHERE CAN I FIND THIS ORDER	1-1
1-4. BACKGROUND.....	1-1
1-5. POLICY.....	1-1
1-6. EXPLANATION OF POLICY	1-2
1-7. SCOPE	1-2
1-8. DISTRIBUTION	1-3
1-9. DISPOSITION OF TRANSMITTAL	1-3
1-10. DEFINITIONS	1-3

Chapter 2. Facility Post-Event Notification Process

2-1. NOTIFICATION PROCESS FOR ACCIDENTS AND INCIDENTS.....	2-1
2-2. NOTIFICATION PROCESS FOR SECURITY,TRAFFIC MANAGEMENT, AND OTHER SIGNIFICANT EVENTS,.....	2-4
2-3. NOTIFICATION PROCESS FOR EQUIPMENT/SERVICE INTERRUPTIONS.....	2-4
2-4. NOTIFICATION LISTINGS	2-5

Chapter 3. Office of Safety Response

3-1. INITIAL ANALYSIS.....	3-1
3-2. PROCESS FOR RED EVENTS.....	3-3
3-3. PROCESS FOR YELLOW EVENTS.....	3-3
3-4. PROCESS FOR GREEN EVENTS	3-4
3-5. RESPONSE TO SELECTED EVENTS	3-4

Chapter 4. On-Site Event Review

4-1. AUTHORITIES.....	4-1
4-2. ON-SITE COORDINATOR UNTIL THE ARRIVAL OF THE EIM.....	4-1
4-3. INITIAL EIM ACTIVITIES	4-1
4-4. NTSB COORDINATION	4-1
4-5. LEGAL COORDINATION	4-2
4-6. UPWARD REPORTING	4-3
4-7. AIR TRAFFIC REVIEW	4-3
4-8. MILITARY COORDINATION.....	4-3
4-9. DATA GATHERING PROTOCOL.....	4-3
4-10. EVENT DATA MANAGEMENT	4-4
4-11. EVENT DATA.....	4-4

Chapter 5. Event Response Conclusion

5-1. NOTIFICATION.....	5-1
5-2. EXIT BRIEFINGS	5-1
5-3. TEAM STATUS.....	5-1
5-4. REQUESTS.....	5-1
5-5. DISPOSITION OF RECORDS FOR INCIDENTS AND ACCIDENTS	5-1
5-6. EIM INVESTIGATION REPORT.....	5-2
5-7. CERTIFICATION AND REFRESHER TRAINING	5-2

Chapter 6. External Release of Information

Paragraph	Page
6-1. PUBLIC RELEASE OF INFORMATION	6-1
6-2. MEDIA REQUESTS.....	6-1
6-3. LITIGATION REQUESTS	6-1
6-4. CONGRESSIONAL REQUESTS.....	6-1
6-5. OTHER REQUESTS	6-1
6-6. ROUTINE DISSEMINATION DURING THE INVESTIGATION PHASE.....	6-1

Chapter 7. FAA Contract and Non-Federal Facilities

7-1. APPLICABILITY OF THIS ORDER.....	7-1
7-2. SUPPORT LIMITATIONS TO FAA CONTRACT AND NON-FEDERAL FACILITYEMPLOYEES.....	7-1

Appendices

Appendix A. Form 1030-1, On-site Event Checklist	A-1
Appendix B. Form 1030-2, Data Request Form.....	B-1
Appendix C. Form 1030-3, NTSB Checklist	C-1
Appendix D. Air Traffic Control Specialist Interview Protocol and Sample Questions	D-1
Appendix E. Technical Investigation Checklist	E-1
Appendix F. Technical Operations Services Aircraft Accident Representative (AFAAR) Responsibilities	F-1
Appendix G. Selection Criteria for the EIM and ERT Members	G-1
Appendix H. Outline of Investigative Report.....	H-1
Appendix I. Acronyms	I-1

Chapter 1. General Information

1-1. PURPOSE OF THIS ORDER

This order describes the ATO's processes, roles and responsibilities, and timelines for collecting and reporting data in response to events in the NAS. Examples of events covered under this order are aviation accidents and incidents, events involving air traffic services, events involving systems used in the delivery of air traffic services, loss of major navigation aids, events that receive significant media interest, or any other events as determined by the Senior Vice President of Operations, the Vice President of the Office of Safety or designee, or service unit(s) Vice President(s). It is important that the ATO conduct an event review for each event to establish the facts, conditions, and circumstances; identify safety issues; and establish meaningful recommendations to prevent or reduce the possibility of recurrence.

Successful post-event management depends on the prompt collection and sometimes urgent relay of accurate information. This order establishes focal points for the collection of these critical data. Following the timelines in this order will ensure that the ATO speaks with one voice and responds appropriately to events in the NAS. The information flow described in this order will also help in appropriately releasing information to other government agencies, Congress, or the public under the Freedom of Information Act (FOIA).

1-2. AUDIENCE

This order applies to all ATO service units, all air traffic control (ATC) facilities, and all FAA contract and non-federal facilities.

1-3. WHERE CAN I FIND THIS ORDER?

This order is available on the MYFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices/.

1-4. BACKGROUND

The review of past air traffic events has given the ATO a long list of best practices about conducting and communicating each event review. These best practices have often been captured in processes used at the local and regional level, but they have not been updated and institutionalized for operations within the structure of ATO Operations and the Office of Safety.

There have also been other events in the NAS (for example, aircraft with extended taxi and ramp hold times, ATC facility outages) that have received significant media/congressional interest. Although many of these types of events are not directly controlled by the ATO, the ATO must respond to inquiries from the media, Congress, and other governmental organizations; for example, the National Transportation Safety Board (NTSB), the Office of the Inspector General (OIG), or the General Accountability Office (GAO). A standardized process and a data collection/reporting system are required for the ATO to meet its obligations and respond in an accurate and timely manner.

1-5. POLICY

- a. Immediately following an event, the parties identified in this order must follow the specific procedures for event notification as outlined in chapter 2 of this order.
- b. This order includes supplementary procedures and does not cancel any current FAA or ATO orders.
- c. Timely, complete, and accurate reporting of information is required.
- d. Facility managers, district managers, and Directors of Operations must provide the necessary resources to meet the requirements of this order. This may require off-hours, weekend, and holiday hands-on leadership.

- e. The parties identified in this order must prioritize these duties and processes ahead of other administrative requirements.
- f. The provisions of this order do not override the provisions of agency collective bargaining agreements.

1-6. EXPLANATION OF POLICY

This order includes responsibilities and authority for an event investigation manager (EIM); organizations supporting the event response, including an event response team (ERT); the three quality control groups (QCG), as well as coordination responsibilities for the Washington Operations Center (WOC); the Regional Operations Centers (ROC); and Operations Control Centers (OCC). It builds on the successful work flow used by the Office of Aviation Safety and the Technical Operations Services Aircraft Accident Representative (AFAAR) for major events. Procedures, checklists, notification priorities, and support processes for the steps in the event response process— including notification, data collection, performance review, release of information, litigation support, and record keeping— are found in this document. The principles outlined in this order must be strictly followed to ensure a successful response to events.

1-7. SCOPE

a. This order gives guidance and a framework for responding to significant events. Based on the level of visibility of the event, one of several responses may occur. For information on the tiered response, see chapter 3.

b. The following are some examples of the types of events for which the provisions of this order may be invoked:

- (1) Aircraft accident/incident.
- (2) Security event, including violations of special flight restricted areas, security temporary flight restrictions (TFR), facility physical security, extended loss of radio communications, suspicious flight activities, etc.
- (3) Significant loss of separation, including near midair collisions reports.
- (4) Significant runway incursion.
- (5) Allegations of reckless operation (for example, low-flying civilian/military aircraft, personnel performance).
- (6) Loss of critical systems (simultaneous or overlapping primary and backup equipment outages).
- (7) Loss of facility operational capability, as defined in FAA Order JO 1900.47.
- (8) Occurrence that generates or could generate high interest from regional/national news media, Congress, the Department of Transportation (DOT), or other government agencies such as the NTSB, OIG, and GAO.
- (9) Encounter with severe turbulence.

c. Additionally, the process described in this order must be invoked for all red events (see chapter 3), or when requested (for yellow events) by the Vice President of the Office of Safety (or designee) or by the Senior Vice President of Operations. The Vice President of an operating service unit may invoke this process by coordinating through the office of the Senior Vice President of Operations. The Directors of Operations may request this process through their Vice Presidents.

1-8. DISTRIBUTION

This order is distributed to the following ATO service units: En Route and Oceanic, Terminal, System Operations, and Technical Operations; the Office of Safety; the Office of the Service Center; Central Quality Control Group, Eastern Quality Control Group, Western Quality Control Group; the Office of Emergency

Operations and Communications, Northwest Mountain Region-ROC; Southern Region- ROC; Southwest Region-ROC; New England Region-ROC; Eastern Region-ROC; Great Lakes Region-ROC; Western-Pacific Region-ROC; Central Region-ROC; Alaskan Region-ROC; all ATC facilities; all FAA, non-federal, and FAA contract facilities; the Air Traffic Safety Oversight Service; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.

1-9. DISPOSITION OF TRANSMITTAL

Retain this order until it is superseded by a change or new basic order.

1-10. DEFINITIONS

a. Event - Any occurrence affecting the safety, efficiency, or effectiveness of the NAS. An event may be classified as red, yellow, or green (see chapter 3).

b. Event Investigation Manager (EIM) - Conducts the overall review of ATO performance and is the primary contact for all aspects of the event review. The EIM may review any data kept by the facility and direct the ERT members.

c. Event Response Team (ERT) - A group of qualified individuals, led by the EIM, responsible for reviewing events (as defined in paragraph 1-10b) and performing other duties as set forth in this order. The ERT must include:

- (1) A QGC representative and/or affected service unit representative.
- (2) Other representative(s) to be determined by the Director(s) of Operations; for example, Technical Operations and System Operations.

d. Post-Accident/Incident Drug and Alcohol Testing Determination Telephone Conference - A telephone conference conducted in accordance with DOT Order 3910.1, Drug and Alcohol Free Workplace, to determine if post-accident/incident drug and/or alcohol testing should be conducted.

e. Services Rendered Telephone Conference - A telephone conference conducted to review and assess ATO services provided during an event.

Chapter 2. Facility Post-Event Notification Process

The following paragraphs track items included on FIG 2-1 and primarily encompass the response-triggering activities and the ATO responses that are expected to result. Every organization involved in the notification process must be constantly aware of the objective to keep information flowing upward (see FIG 2-2).

2-1. NOTIFICATION PROCESS FOR ACCIDENTS AND INCIDENTS

a. Initial Notification for Accidents and Incidents.

(1) Immediately after an accident or air traffic incident that might generate significant media/congressional interest, the facility involved must notify the ROC and the OCC.

(2) ROC personnel must notify the on-duty specialist from the Service Center QCG and the WOC. The WOC will notify the appropriate Director(s) of Operations of the event, following established procedures.

(3) Following established procedures, the WOC must provide immediate notification to the Office of Safety on-call quality assurance (QA) representative (before the notification of the Services Rendered Telephone Conference is sent). The Office of Safety on-call QA representative must ensure the appropriate Director(s) of Operations is notified of the event as soon as is practical, and then follow the process outlined in chapter 3. See Pathway A in FIG 2-1.

NOTE-

Pathways A and B in FIG 2-1 are intended to be parallel processes that occur simultaneously.

b. Services Rendered Telephone Conference. Following an event (and regardless of the Office of Safety's level of response), the Service Center QCG must convene a Services Rendered Telephone Conference as outlined in FAA Order 8020.16, Chapter 3. The affected Director(s) of Operations or designee must participate in the Services Rendered Telephone Conference. ROC-initiated telephone conferences are preferred to control participation in this meeting/discussion.

(1) This telephone conference must occur within 3 hours of the time that the facility becomes aware that the event occurred.

(2) The QCG must send a notification of the Services Rendered Telephone Conference to the ROC. See Pathway B in FIG 2-1.

(3) Once the ROC has been notified that a Services Rendered Telephone Conference is required, they will notify the WOC, and the WOC convenes the conference with the Office of Safety on-call QA representative, the operational Service Unit headquarters office, the appropriate Director of Operations, and the Office of Accident Investigation (AAI).

(4) Before the Services Rendered Telephone Conference, facility management must review any and all available ATC communications and display/radar playback (terminal radar approach controls [TRACON], and air route traffic control centers [ARTCC]) to determine the quality of service provided. Paragraph 4-11 contains specifics on data to be reviewed. Facility management must make the audio communications available for playback during the Services Rendered Telephone Conference.

(5) The Office of Safety and AAI will participate in the telephone conference and conduct a preliminary review of the information that is known at that time. The Office of Safety may use the Services Rendered Telephone Conference to make the decision to activate the ERT (for yellow events) and to commence other activities.

(6) The Office of Safety representative on the Services Rendered Telephone Conference must review the audio communications for all red and yellow events.

(7) During the review of services, the QCG must determine whether any non-compliance with FAA orders and directives occurred, regardless of whether this non-compliance was related to the event.

FIG 2-1
Event Notification

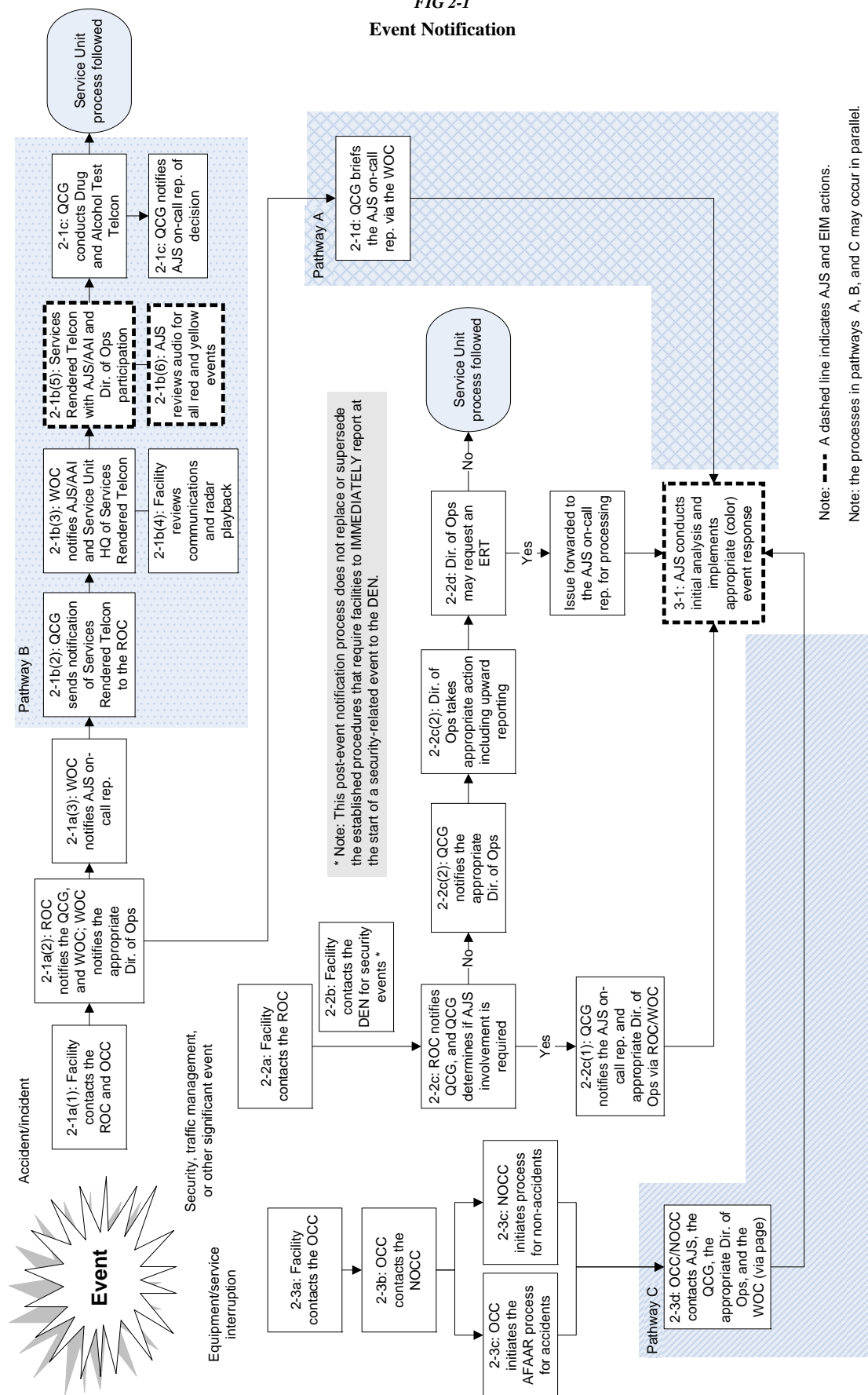
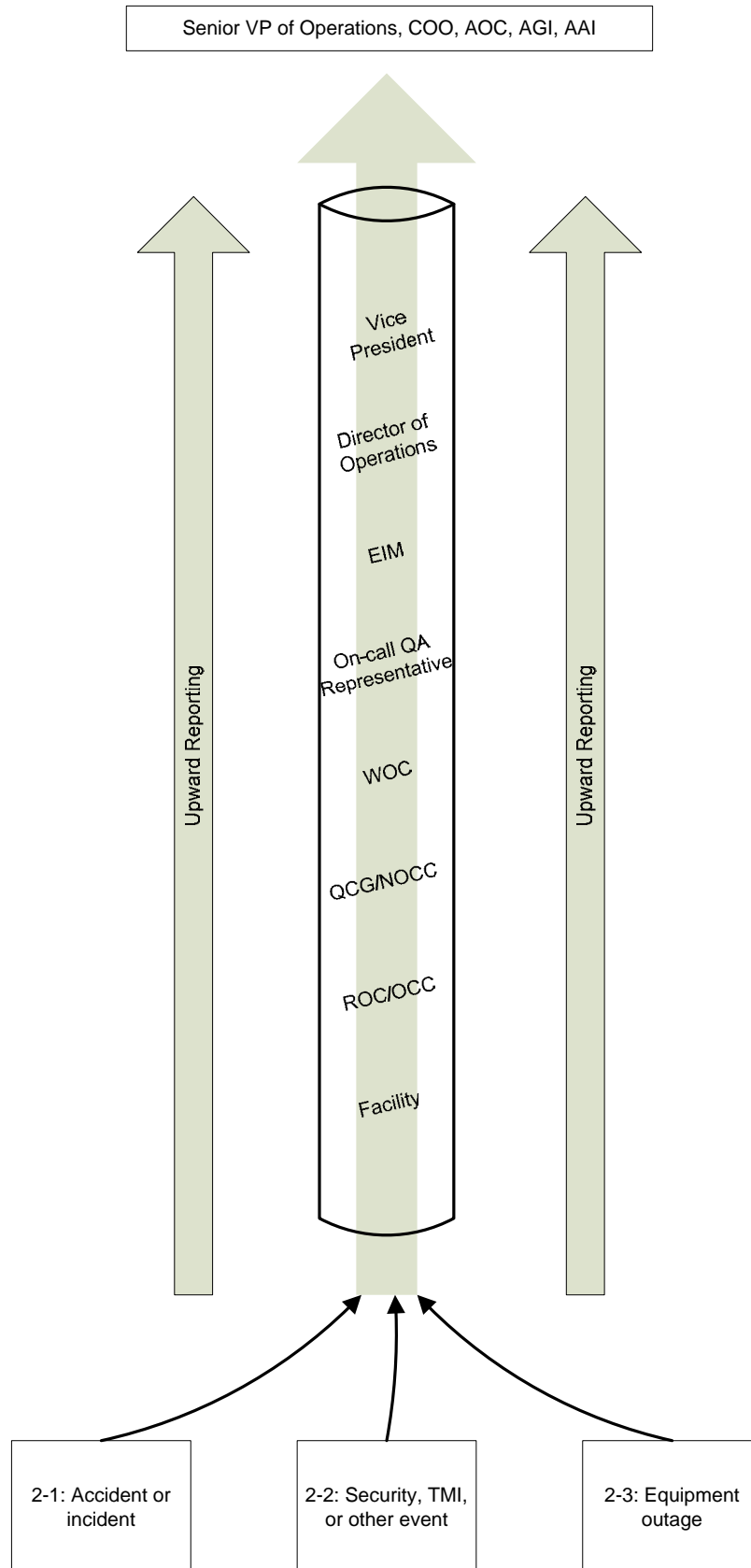


FIG 2-2
Upward Reporting



c. Post-Accident/Incident Drug and Alcohol Testing Determination Telephone Conference. The QCG convenes a Post-Accident/Incident Drug and Alcohol Testing Determination Telephone Conference on behalf of the Directors of Operations for events covered by DOT Order 3910.1, Drug and Alcohol Free Workplace. The affected Director(s) of Operations is responsible for determining whether to conduct drug and/or alcohol testing. In the event that the Office of Safety on-call QA representative is not a participant in this telephone conference, immediately following the conclusion of the Service Area Post-Accident/Incident Drug and Alcohol Testing Determination Telephone Conference, the QCG must communicate the decision whether to perform drug and alcohol testing to the Office of Safety on-call QA representative.

d. Following established procedures in FAA Order 8020.16, Chapter 3, the QCG through the ROC/WOC must provide a briefing to the Office of Safety on-call QA representative on the event as soon as practical, preferably in less than 1 hour after becoming aware of the event.

2-2. NOTIFICATION PROCESS FOR SECURITY, TRAFFIC MANAGEMENT, OR OTHER SIGNIFICANT EVENTS

a. Immediately after a security, traffic management, or other significant operational event that may generate significant media/congressional interest, the facility involved must notify the ROC.

b. For security events, facilities must also notify the Domestic Events Network (DEN), following established procedures found in FAA Order 7610.4, Special Operations.

NOTE-

This post-event notification process does not replace or supersede the established procedures which require facilities to immediately report at the start of a security-related event to the DEN. Following established procedures, the DEN will continue to carry out real-time coordination with involved facilities, ATO leadership, and other stakeholders, as needed.

c. The ROC must notify the on-duty specialist from the Service Center QCG, and the QCG will determine whether to provide immediate notification to the Office of Safety on-call QA representative. It is expected the QCG will notify the WOC, through the ROC, of the event and the ATO organization responsible for the event review immediately following ROC notification.

(1) If Office of Safety involvement is required, the QCG will notify the WOC, through the ROC, of the notification required. The WOC will ensure the Office of Safety on-call QA representative and the appropriate Director of Operations are notified of the event. The process outlined in chapter 3 must then be followed. Also see FIG 2-1.

(2) If the Office of Safety is not involved, the QCG must ensure the appropriate Director of Operations is notified of the event. The Director of Operations is responsible for taking appropriate follow-up action, including upward reporting to all affected service unit Vice Presidents and the Senior Vice President of Operations.

d. The Director of Operations may request an ERT, following procedures in paragraph 1-7c.

2-3. NOTIFICATION PROCESS FOR EQUIPMENT/SERVICE INTERRUPTIONS

a. Immediately after an equipment/service interruption that might generate significant media/congressional interest, the facility involved must notify the OCC.

b. In turn, the OCC must contact the National Operations Control Center (NOCC) when sufficient information is available.

c. For accidents, OCC personnel must initiate the AFAAR process (see appendix F). For other events (non-accidents), NOCC personnel will initiate their non-accident process.

d. For all events that might generate significant media/congressional interest, OCC/NOCC personnel must notify (via page) the Office of Safety on-call QA representative, the appropriate Director of Operations responsible for the affected facility(s), the WOC, and the QCG. The process outlined in chapter 3 must be followed.

2-4. NOTIFICATION LISTINGS

a. The ATO is responsible for maintaining the list of personnel/offices that are referenced in this chapter during the notification process. Specifically, the Office of Safety (AJS) is responsible for updating the following positions so that notifications specified in this order are properly received:

- (1) Office of Safety on-call QA representatives
- (2) Quality Assurance Director
- (3) Vice President for the Office of Safety
- (4) Senior Vice President of Operations
- (5) Chief Operating Officer

b. AAI is responsible for updating their own on-call specialists so that notifications specified in this order are properly received. The Service Center QCGs are responsible for updating their own on-duty specialists so that notifications specified in this order are properly received. The Office of Safety, the Service Center QCGs, and AAI are responsible for distributing any changes to the ROCs and WOC respectively.

Chapter 3. Office of Safety Response

3-1. INITIAL ANALYSIS

Upon being notified and briefed by the QCG, ROC, WOC, and/or OCC/NOCC the Office of Safety on-call QA representative must conduct an initial analysis and implement the appropriate level (red, yellow, green) of event response. The following paragraphs track items included on FIG 3-1 and primarily encompass the response triggering activities and the ATO responses that are expected to result.

NOTE-

“Event response” describes only the activities in this order using the red, yellow, green event references; it does not include the procedures contained in other policy documents.

a. Red Events. The Office of Safety on-call QA representative must classify events as red, using sound judgment and expertise, when the Office of Safety on-call QA representative believes that an ERT should be launched immediately. These events might include, but are not limited to:

- (1) Air carrier/air taxi accidents
- (2) Events with significant media or political interest.
- (3) Events for which the NTSB convenes an Air Traffic Control Work Group to conduct an on-site investigation.
- (4) Acts of terrorism an/or major crimes at an ATO facility
- (5) Natural disasters at an ATO facility.

For the specific procedures for red events, see paragraph 3-2.

b. Yellow Events. The Office of Safety on-call QA representative must classify events as yellow, using sound judgment and expertise, when the Office of Safety on-call QA representative believes that more information is needed to determine whether an on-site event review of air traffic services is required. Such events may include:

NOTE-

“Event review” describes only activities in this order; it does not include procedures contained in other policy documents.

- (1) Accidents where air traffic services were provided.
- (2) On-duty event where an employee receives serious/fatal injuries.
- (3) Losses of standard separation where less than 66 percent was maintained and the safety risk is judged to be medium or high.
- (4) Surface events.
- (5) Service delivery problems.

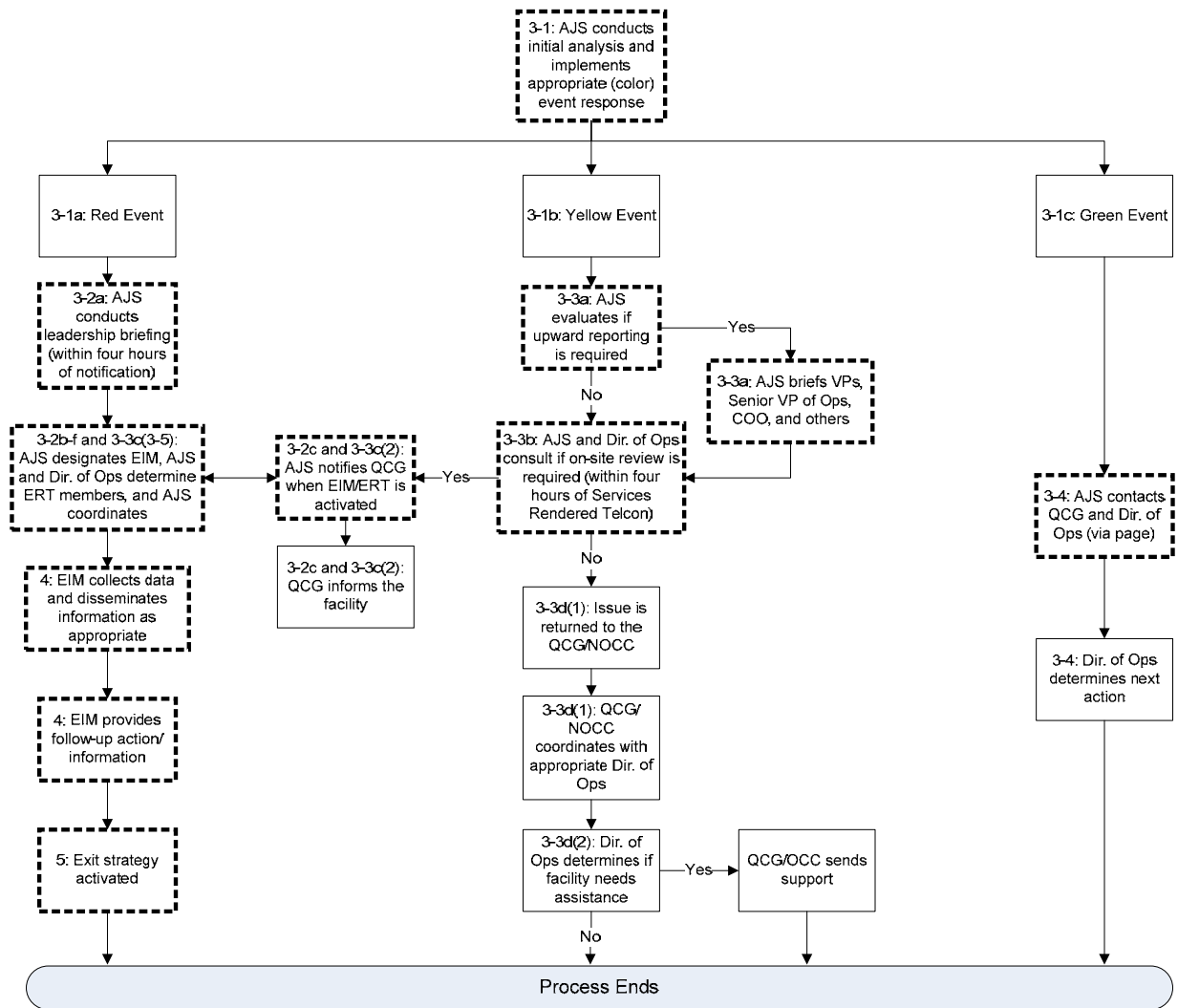
For the specific procedures for yellow events, see paragraph 3-3.

c. Green Events. The Office of Safety on-call QA representative must classify events as green, using sound judgment and expertise, when the representative believes that no headquarters response appears to be required. Examples of events that would be classified as green include:

- (1) Commercial power failure
- (2) Inadvertent physical damage to navigational facilities.
- (3) Loss of standard separation where 66 percent or more was maintained and the safety risk is judged to be low.
- (4) Pilot deviation.

For the specific procedures for green events, see paragraph 3-4.

FIG 3-1
Three-tiered Response



Note: - - - A dashed line indicates AJS and EIM actions.

3-2. PROCESS FOR RED EVENTS

- a. When the Office of Safety on-call QA representative determines that a red event has occurred, the on-call QA representative must contact the Office of Safety QA Director or designee who will ensure the COO, the Senior Vice President of Operations, the Vice President of the Office of Safety, the service unit Vice President(s), and others as appropriate are briefed. This briefing must be conducted as soon as adequate information is available, but no later than 4 hours after learning of the event. The briefing must contain all available information about the event and the fact that the ERT is being launched.
- b. The Vice President of the Office of Safety or designee must designate the EIM for the ERT based on a list of approved EIMs maintained by the Office of Safety. (For more information on the EIM, see paragraph 1-10b and appendix G.)
- c. The Office of Safety on-call QA representative must inform the QCG that headquarters is launching the ERT immediately. The QCG must inform the facility's management point of contact.
- d. Once the EIM has been identified, coordination must take place between the EIM, the Office of Safety Quality Assurance Director, and the appropriate Director of Operations to determine the size and composition of the ERT. Team members are designated by their organizations to assist the Office of Safety. The Office of Safety on-call QA representative must notify the EIM of the offices that are sending representatives to participate in the ERT.
- e. The Vice President of the Office of Safety or designee must communicate the decision to implement a red event and/or launch the ERT to the COO, the Senior Vice President of Operations, and the appropriate service unit Vice President(s).
- f. As soon as practical following the event notification, the Office of Safety Quality Assurance Director must notify the Assistant Chief Counsel for Litigation of the event, that an ERT is being launched, whether the NTSB is participating, and who has been designated as the EIM.
- g. When a red event occurs, an Office of Safety representative must participate in the Services Rendered Telephone Conference to gain additional information while the ERT is en route to the facility where the event occurred.
- h. The event review process described in chapter 4 must be followed.

3-3. PROCESS FOR YELLOW EVENTS

- a. When the Office of Safety on-call QA representative determines that a yellow event has occurred, the on-call QA representative must decide, using sound judgment and expertise, whether upward reporting is required. If upward reporting is required, the on-call QA representative must contact the Office of Safety QA Director or designee to determine who should be briefed. At a minimum, consider upward reporting certain yellow events to the COO, the Senior Vice President of Operations, the Vice President of the Office of Safety, the service unit Vice President, and others as appropriate.
- b. Based on the information discussed in the Services Rendered Telephone Conference and a review of the voice tapes, the Office of Safety on-call QA representative and the Vice President of the Office of Safety or designee, in consultation with the Director of Operations, will determine whether an on-site event review is required and whether the ERT should be launched, within 4 hours of the Services Rendered Telephone Conference.
- c. If the determination is made to launch the ERT:

 - (1) The Vice President of the Office of Safety or designee must designate the EIM for the ERT based on a list of approved EIMs that the Office of Safety maintains. (For more information on the EIM, see paragraph 1-10b and appendix G.)
 - (2) The Office of Safety on-call QA representative must inform the QCG immediately when headquarters has decided to launch the ERT. The QCG must inform the facility's management point of contact.

(3) Once the EIM has been identified, coordination must take place between the EIM, the Office of Safety Quality Assurance Director, and the appropriate Director of Operations to determine the size and composition of the ERT. Team members are designated by their organizations to assist the Office of Safety. The Office of Safety on-call QA representative must notify the EIM of the offices that are sending representatives to participate in the ERT.

(4) The Vice President of the Office of Safety or designee must communicate the decision to implement a yellow event and/or launch the ERT to the COO, the Senior Vice President of Operations, and the appropriate service unit Vice President(s).

(5) The Office of Safety Quality Assurance Director must notify the Assistant Chief Counsel for Litigation within 8 hours of any yellow event with an accident where air traffic services were provided. The Office of Safety Quality Assurance Director must communicate whether an ERT is being launched, whether the NTSB is participating, and who has been designated as the EIM (if applicable).

(6) The event review process described in chapter 4 must be followed.

d. If the determination is made not to launch the ERT:

(1) The Office of Safety on-call QA representative defers back to the QCG or OCC/NOCC, who will coordinate with the appropriate Director of Operations. The Director of Operations is responsible for taking appropriate follow-up action, including upward reporting to the Vice President and the Senior Vice President of Operations.

(2) The Director of Operations will determine if the facility needs assistance and must send support if warranted.

3-4. PROCESS FOR GREEN EVENTS

When the Office of Safety determines that a green event has occurred, the on-call QA representative will notify the QCG and the Director of Operations. The Director of Operations is responsible for taking appropriate follow-up action, including upward reporting to all affected service unit Vice Presidents and the Senior Vice President of Operations. If appropriate, the Office of Safety or the QCG will prepare a voice and radar reconstruction of the event and ensure that all files associated with the event are stored on the Office of Safety Knowledge Sharing Network (KSN) site.

3-5. RESPONSE TO SELECTED EVENTS

The Vice Presidents of the operational service units may request that an ERT be implemented through the Senior Vice President of Operations. Directors of Operations may initiate such requests through their Vice Presidents.

Chapter 4. On-Site Event Review

4-1. AUTHORITIES

- a.** For safety events, this order grants authority to the EIM. The authority of each member of the ERT comes from FAA Orders JO 7210.3, 8020.11, and 8020.16.
- b.** For non safety-related events, the Senior Vice President of Operations or designee grants authority to the EIM and the ERT.
- c.** The EIM manages all ATO resources at the scene, determines the facts of the event, and disseminates and briefs information to Office of Safety management and senior ATO leadership, as appropriate. A member of the ERT may be excused or replaced by the EIM at any time. Team members are required to remain on-site until released by the EIM.

4-2. ON-SITE COORDINATOR UNTIL THE ARRIVAL OF THE EIM

The air traffic manager or designee of the facility is responsible for designating the air traffic on-site coordinator until the arrival of the EIM.

4-3. INITIAL EIM ACTIVITIES

Immediately upon arriving at the facility where the event occurred (or the FAA facility where the event review will take place), the EIM must:

- a.** Make contact with the Office of Safety on-call QA representative to get any additional information about the event. At this point, responsibility for review of the event transfers from the on-call QA representative to the EIM.
- b.** As the ATO's on-site representative, assume the lead ATO role for all activities regarding the NTSB investigation and ATO event-response review.
- c.** Conduct an in-brief with the air traffic manager and System Support Center (SSC) or General National Airspace System (GNAS) manager on expectations, requirements, and responsibilities of the EIM.
- d.** Convene the ERT for an introductory meeting. The EIM must define the ATO's responsibilities, procedures, and objectives for the event review, as well as explain what is expected of each team member.
- e.** Ensure that the operational integrity of air traffic facilities is not compromised.
- f.** Determine if navigational facilities and/or ATC equipment is involved or suspected of being involved and determine if all required notification has been accomplished, including the appropriate Notices to Airmen (NOTAM).
- g.** As the ATO representative, establish liaison with the FAA Investigator in Charge (IIC) and act as the FAA IIC's principal contact for ATO information and documents. Provide an initial briefing of pertinent facts to the FAA IIC at the earliest opportunity.
- h.** Establish and maintain contact with the Director(s) of Operations for the service unit(s) involved in the event.
- i.** Begin the On-site Event Review Checklist (see appendix A).

4-4. NTSB COORDINATION

The EIM must personally direct all ATO facility activities with respect to an on-site NTSB Air Traffic Control Work Group or delegate the following activities:

- a.** Act as the primary ATO liaison with the FAA IIC or FAA NTSB Air Traffic Control Work Group member.
- b.** Facilitate and assist facility personnel in the compilation of audio recordings, radar data, and other related documentation requested by the NTSB.

- c. Check that data and information are complete and acceptable before they are provided to the NTSB.
- d. Act as the sole ATO representative responsible for providing data directly to the NTSB, only with the concurrence of the FAA IIC/FAA NTSB Air Traffic Control Work Group member. Copies of data/information should be provided to the FAA IIC, if requested.
- e. When advised by the FAA IIC/FAA NTSB Air Traffic Control Work Group member that the NTSB requires a briefing on the air traffic aspects surrounding the event, arrange for the air traffic manager or designee to provide the requested briefing as soon as possible. Any direct requests from the NTSB to the facility must be coordinated with the FAA IIC/FAA NTSB Air Traffic Control Work Group member before granting the NTSB access.

4-5. LEGAL COORDINATION

While on-site, the EIM must establish and maintain contact with the Assistant Chief Counsel for Litigation (or designated representative).

- a. For events related to accidents, incidents, and other situations where tort litigation may arise, the Assistant Chief Counsel for Litigation is the primary office responsible for providing legal counsel to the Administrator and all FAA employees. For accidents, the Litigation Division attorney assigned to the accident will provide legal advice and counsel to those facilities and employees whose performance is being reviewed by the NTSB, as needed. The EIM must notify the Assistant Chief Counsel for Litigation as soon as possible so that appropriate personnel can be assigned to support the facility.
- b. When notified of an event, the Assistant Chief Counsel for Litigation will determine who from the Chief Counsel's Office will respond and provide timely legal support to employees and the EIM/ERT. The EIM must provide the Assistant Chief Counsel for Litigation attorney or designee with a brief overview of the initial report and coordinate with the attorney to be at the facility when the NTSB arrives at the facility. The EIM should be prepared to give the attorney information regarding local accommodations, the address of ATO facilities, local facility contact information, and any other pertinent information.
- c. The EIM must coordinate and schedule the following activities with the Assistant Chief Counsel for Litigation (or designated representative):
 - (1) A review of pertinent information (for example, transcripts, radar replay, airspace, procedures in question, a tour of the physical space, a review of personnel statements, the NTSB's requested order of witnesses, the proposed schedule for briefing witnesses).
 - (2) A facility manager consultation.
 - (3) The provision of pertinent documents to the attorney after the field phase is completed.
 - (4) Review of the in-briefings and out-briefings provided to the NTSB Air Traffic Control Work Group (if requested).
 - (5) Any other pertinent activities.
- d. The EIM must brief the attorney as needed to keep the attorney informed of any new information concerning the services provided by the ATO or any other issue related to the NAS. If multiple facilities are involved, the EIM must coordinate with the attorney to ensure that all facilities and employees are provided legal services.
- e. The EIM must contact air traffic personnel involved in the event, arrange for the protection of their well-being as required, and provide them with a briefing on investigation procedures and their right to counsel and union representation (if appropriate) during any interview. Additionally, the EIM must inform personnel of their rights as they pertain to drug or toxicology tests.

NOTE-

The EIM needs to ensure that activities related to any personnel involved in the event follow the provisions in appropriate collective bargaining agreements.

f. The EIM must arrange with the Assistant Chief Counsel for Litigation to conduct pre- and post-interview debriefings of all FAA ATO employees with whom the NTSB requests an interview.

4-6. UPWARD REPORTING

a. The EIM must disseminate and brief information to Office of Safety management, the Senior Vice President of Operations, the involved service unit(s) Vice President(s), and the involved Director(s) of Operations.

b. The EIM is required to brief the Senior Vice President of Operations and the Vice President of the Office of Safety or designee each day regarding the progress of the NTSB investigation and ATO event review. Daily briefing times will be scheduled in advance, and notifications will be made to appropriate service unit Vice Presidents and Director of Operations for their participation.

c. Briefings must be conducted until the field phase of the investigation is completed.

4-7. AIR TRAFFIC REVIEW

During the on-site investigation, the EIM must conduct a review of all air traffic aspects of the event to confirm the adequacy of equipment, procedures, and personnel. The EIM must promptly advise the FAA's IIC, the Senior Vice President of Operations, the Vice President of the Office of Safety or designee, the involved service unit Vice President(s), and the appropriate Director(s) of Operations of any deficiencies noted and the recommended corrective actions.

4-8. MILITARY COORDINATION

a. When air traffic services are involved in a military event and the Office of Aviation Safety's Accident Investigation Division or the Flight Standards District Office does not designate an IIC, the EIM must 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.

b. The EIM must coordinate with the Assistant Chief Counsel for Litigation any requests from the military to interview or obtain a written statement from an employee of the FAA.

4-9. DATA GATHERING PROTOCOL

a. As directed by the EIM, ERT members gather data related to the event.

b. ERT members must keep the EIM informed of all aspects of the event review.

(1) Information related to the event or to the air traffic operation that is discovered by a member of the ERT during the on-site portion of the event review must be provided to the EIM as soon as possible and before dissemination to persons outside of the ERT.

(2) To ensure that the most comprehensive and complete information is available to ATO executives, members of the ERT and the EIM must communicate all of the information they receive.

(3) Although the EIM receives and responds to requests for information from the NTSB through the FAA's IIC/FAA NTSB Air Traffic Control Work Group member, members of the ERT must deliver information they receive only to the EIM unless otherwise authorized by the EIM.

c. All members of the ERT must ensure that every organization with data is expediting these data to the EIM. Any member of the ERT may, as directed by the EIM, call upon the facilities, appropriate terminal districts, appropriate Directors of Operations, and headquarters organizations during the conduct of the ERT event review.

d. The facility must comply with the requests made by the EIM.

(1) Expedited handling of data requests may occur if the ERT determines that their timely review cannot withstand the anticipated delay due to published policies and processes for supplying requested data.

(2) Operating service units should identify reach-back resources (not located with the members of the ERT) that are capable of rapid response to ERT action requests.

4-10. EVENT DATA MANAGEMENT

a. The EIM must ensure that all original documentation is protected, including the original voice tapes and/or computer data. The release of any original document, voice tape, personnel statement, or computer data file without the written approval of the ATO Litigation Support Office is prohibited.

b. The release of any information outside of the ATO, other than to AAI and the NTSB, must be approved by the Vice President of the Office of Safety or designee who will ensure appropriate coordination with the Senior Vice President of Operations, the Office of Communications, the Office of Government and Industry Affairs, the COO, and the Administrator.

c. The EIM must aid or arrange for additional personnel to aid the air traffic facility in preparing the event documentation and material requested by the FAA IIC/FAA NTSB Air Traffic Control Group member.

d. Facility managers must ensure that data associated with the event are properly secured and that their dissemination is restricted (except to the appropriate Director of Operations, the QCG, and ERT members) unless authorized by Office of Safety management personnel or the EIM.

4-11. EVENT DATA

a. Event Synopsis. The QCG must provide a brief summary of the event, including what happened, services rendered, alcohol/drug test determination, equipment anomalies, staffing and/or personnel issues, weather including pilot reports (PIREP)/significant meteorological information (SIGMET)/airmen's meteorological information (AIRMET), surface conditions, NOTAMs, traffic (previous arrival/departure/overflight), etc., to Office of Safety personnel within 6 hours from QCG notification. Changes to the data requests listed below must be approved by the EIM.

b. Event Replay Data.

NOTE-

It is very important that each facility become and remain familiar with its audio and computer data reduction equipment (radar, Airport Movement Area Safety System [AMASS], Airport Surface Detection Equipment [ASDE], etc.), transfer capabilities, and protocols, so if and when the need arises, unnecessary delays are not encountered.

(1) En Route and Oceanic.

(a) Facilities with Systematic Air Traffic Operations Research Initiative (SATORI) capability must initially provide a SATORI replay (from approximately 5 minutes before entry into the sector to approximately 5 minutes after leaving the sector) for the sector in which the event occurred. SATORI replays for all sectors that provided services to the aircraft during the 20 minutes before the event must be prepared at the direction of the EIM. Combined sectors can be considered as one sector for this activity. The first SATORI replay must be prepared for the sector that provided service closest to the event. This replay must be uploaded to the secure KSN data location [<https://ksn2.faa.gov/faq>] within 3 hours of the reported event.

(b) Advanced Technologies and Oceanic Procedures (ATOP) facilities must provide a System Analysis Recording (SAR) extraction with all relevant flight movement, safety function output, communication/coordination exchanges, external interface input/output, controller input messages/actions, audio file(s), and data recording and playback (DRPS) files for the same time period described above. SAR data must only be filtered for time unless otherwise authorized by Office of Safety personnel.

NOTE-

DRPS replays can only be viewed on ATOP equipment at the operational ATOP sites; the William J. Hughes Technical Center; and the Lockheed Martin lab in Rockville, MD.

(c) Microprocessor En Route Automated Radar Tracking System (MEARTS) facilities must provide a continuous data recording (CDR) extraction with data classes TD, RT, RB, BT, and SC and an audio file for the time period described above. CDR data must only be filtered for time unless otherwise authorized by Office of Safety personnel.

NOTE-

Falcon data with the associated ATC communications will relieve the 3-hour requirement; however, a SATORI replay must be prepared within 24 hours.

(2) Terminal. The QCG must ensure that data is extracted and upload them to a secure KSN site as soon as possible but in no case later than 3 hours after the event unless otherwise authorized by Office of Safety personnel.

c. Audio Data. Facilities that can create electronic audio files must provide an MP3 or WAV file with the time channel without skip silence for each position that provided service to the aircraft from approximately 5 minutes before initial contact to approximately 5 minutes after the event. For expediency, audio files during this initial stage do not need to be certified unless otherwise directed by Office of Safety personnel. Digital Audio Legal Recorder (DALR) access may permit Office of Safety personnel to obtain audio data remotely. Facilities that cannot prepare audio files within 3 hours after the event must be able to play the audio over the phone when directed.

d. Radar Data. The file must include data from 5 minutes before initial contact to 5 minutes after the event. Common Automated Radar Terminal System (ARTS) facilities must provide a CDR extraction with the following data classes: TA, TU, TG, and CR. Standard Terminal Automation Replacement System (STARS) facilities must provide a Plot Playback (PPB) file with the Exercise Filter set to Operational Data only.

NOTE-

National Offload Program (NOP) access may permit Office of Safety personnel to obtain tracking data remotely.

(1) Surface Surveillance Data. To obtain a video playback of an ASDE-X or ASDE-3/AMASS recorded surface event, contact the National Airway Systems Engineering Group Surface Radar Systems Team through the AFAAR. Requests should include the playback start time and stop time, as well as the identification of involved aircraft.

NOTE-

During normal business hours, a video playback for a recorded surface event can typically be created in 1 hour (for set up and processing of the data) plus the duration of the playback. Additional time is necessary for the local extraction of ASDE-3/AMASS data and transmission to National Airway Systems Engineering. Response times outside of normal business hours depend on personnel availability and travel time/distance to the duty station. Safety equipment is not to be disabled or taken off-line for data extraction without the approval of the facility manager.

(2) ASDE-X Data. A remote data connection exists between each operational ASDE-X facility and the National Airway Systems Engineering Group, located at the Mike Monroney Aeronautical Center in Oklahoma City. An on-site data recorder automatically captures and transfers ASDE-X system data to a central repository located in Oklahoma City via this remote connection.

(3) ASDE-3/AMASS Data. A remote data connection for ASDE-3/AMASS facilities does not exist. ASDE 3/AMASS recorded surface event data must be extracted locally by Technical Operations Support personnel and then forwarded to the National Airway Systems Engineering Group Surface Radar Systems Team for video playback creation. ASDE-3/AMASS log data may only be extracted during a scheduled system outage. ASDE 3/AMASS data extraction procedures are contained in paragraph 534 of FAA Order JO 6330.5B, Maintenance of Airport Surface Detection Equipment (ASDE-3) Collocated with Airport Movement Area Safety System (AMASS).

e. Transcripts.

(1) The QCG must ensure that transcripts are prepared in accordance with FAA Order 8020.16. The EIM will determine whether a full or partial transcript is required. The draft transcript must be prepared within 48 hours of the event.

(2) The EIM must provide the FAA IIC/FAA NTSB Air Traffic Control Work Group member with working copies of draft transcripts and voice tapes as soon as possible.

f. Low-Level Windshear Alert System (LLWAS) Data. When requested, the AFAAR will coordinate with the National Airways Systems Engineering Group to extract and record the requested data. LLWAS data may take up to 24 hours to produce.

g. Runway Visual Range (RVR) Recording. When requested, the AFAAR must coordinate with the facility to prepare the RVR recording. This recording may take up to 24 hours to produce.

h. Instrument Landing System (ILS), Very High Frequency Omnidirectional Range (VOR), and Distance Measuring Equipment (DME) “As-found Readings.” When requested, the AFAAR must coordinate with the facility to produce ILS, VOR and DME “as-found readings.” These readings may take up to 24 hours to record depending on staffing levels and travel time to a potentially remote location.

i. Terminal Doppler Weather Radar (TDWR) data. When requested, the AFAAR must coordinate with the facility to archive and record any TDWR data required. The data may take up to 24 hours to produce.

j. Weather Data. The EIM must establish and maintain contact with the National Weather Service (NWS) to obtain a data save of pertinent weather observation and forecast information. The EIM must contact the NWS Automated Surface Observing System (ASOS) Operations and Monitoring Center (AOMC) at 1-800-242-8194/8895 or AOMC@noaa.gov to initiate a data save of 1-minute observations. Usually 1-minute data sets from 1 hour before the event to 1 hour after the time of the event are sufficient. The EIM must also contact the NWS Aviation Weather Center lead forecaster desk at 816-584-7269 to initiate a data save of pertinent weather forecast information.

k. Flight Plans. The EIM must obtain flight plan information from the Lockheed Martin Flight Service (LMFS), Direct User Access Terminal Service (DUATS), or Alaska Flight Service Station (FSS), as appropriate.

(1) For an event that occurs in the continental United States, the EIM must contact the Lockheed Martin Flight Service Operations Center (FSOC) at 703-724-7552/703-439-9790. A fax number is also available: 703-729-5270. The Lockheed Martin FSOC will check for any services provided by Lockheed Martin or DUATS and provide the requested data to the EIM. If audio data are requested and more than 15 days have passed since the event, there may be a delay from Lockheed Martin as the FSOC does not have the ability to retrieve archived data. Text data are only stored for 15 days unless they have already been requested for the event investigation. If the Lockheed Martin FSOC is unavailable, the EIM must contact the Flight Service Program Office.

(2) For an event that occurs in Alaska, the EIM must contact the FSS located closest to the event site. The FSS will then coordinate with other facilities as necessary to provide the requested data. Of the Alaska facilities, three operate 24/7. If information is needed during the time that an FSS is closed, the call will be routed to the appropriate full-time FSS. Again, text data are only stored for 15 days, and audio information is stored for 45 days unless it has been previously requested for an event investigation. Contact numbers for Alaska facilities are located in the Alaska Airport/Facilities Directory.

Chapter 5. Event Response Conclusion

5-1. NOTIFICATION

The EIM must inform the affected facility manager(s), the affected Director of Operations, and the Vice President of the Office of Safety when the NTSB and the FAA IIC/FAA NTSB Air Traffic Control Work Group member(s) and/or the ERT have departed the facility and/or when the field phase of any event review is complete.

5-2. EXIT BRIEFINGS

The EIM must:

- a. Arrange for an exit briefing by the NTSB Air Traffic Control Work Group Chairman.
- b. Conduct a separate exit briefing with the ERT, facility management, and Director of Operations.

5-3. TEAM STATUS

- a. Once the EIM recommends that the ERT's on-site review of the event be concluded, the Vice President of the Office of Safety or designee will decide on the official status of the ERT members. If desired, the official status of the ERT may continue as long as necessary to complete the data collection, analysis, and report formulation.
- b. Once official support to the ERT is suspended, individuals with access to the data that were collected during any portion of the event review must continue to adhere to the policies outlined in this order and in all other applicable policies.

5-4. REQUESTS

NTSB and FAA IIC/FAA NTSB Air Traffic Control Work Group member requests directed to the ATO that are generated after the completion of the field phase will be handled in accordance with FAA Order 8020.11 or FAA Order 8020.16.

5-5. DISPOSITION OF RECORDS FOR INCIDENTS AND ACCIDENTS

- a. For all incidents and accidents, the EIM and the ERT must retain and protect all pertinent data for analysis. At the conclusion of an NTSB investigation or ATO review, the facility must retain all original records; a copy of each record must be given to the Office of Safety.
- b. For incidents and accidents involving one or more fatal injuries, the Office of Safety must maintain associated raw data (in electronic form, if available) in accordance with FAA Order 8020.11 or FAA Order 8020.16.
- c. Accident and incident data related to litigation must be retained in accordance with the direction of the Assistant Chief Counsel for Litigation. Retention periods are described in FAA Orders 1350.15, Records Organization, Transfer, and Destruction Standards and FAA Order 8020.16, Air Traffic Organization Accident and Incident Notification, Investigation, and Reporting.

5-6. EIM INVESTIGATION REPORT

- a. Within 10 days of the conclusion of all investigative activities, the EIM must prepare a report to the Vice President of Safety of the activities undertaken during the investigation (for example, interviews, data reviews). This report must describe all identified non-compliances and other relevant performance/safety issues and provide recommendations to address the identified issues. Appendix H contains a short outline for the EIM's report following all red and yellow events.

- (1) The EIM must solicit comments on the draft report from ERT members.

(2) ERT members must ensure the accuracy of the data in the report.

b. If safety concerns arise during the event review, the EIM must inform the Vice President of Safety so that they can be addressed immediately or further investigated.

5-7. CERTIFICATION AND REFRESHER TRAINING

The Office of Safety must:

a. Ensure that, at a minimum, there are three approved EIMs within the Office of Safety at any given time (barring extreme circumstances) and that these EIMs are available to perform the functions described in this order. EIM qualification requirements are listed in appendix G.

b. Conduct annual refresher training for EIMs, as developed by ATO Technical Training. Refresher training must include mock exercises (for example, drills) designed to simulate possible events and should preferably be conducted in conjunction with AAI training. EIMs may elect to include frequently used ERT members in the annual refresher training and mock exercises.

c. Ensure that new EIMs receive accident investigations training, participate in briefings provided by AAI, and receive on-the-job training (OJT) during at least two on-site event reviews as ERT members.

Chapter 6. External Release of Information

6-1. PUBLIC RELEASE OF INFORMATION

a. The release of any information outside of the ATO, other than to AAI and the NTSB, must be approved by the Vice President of the Office of Safety or designee who must ensure appropriate coordination with the Senior Vice President of Operations, the Office of Communications, the Office of Government and Industry Affairs, the COO, and the Administrator.

b. The EIM must direct all public inquiries concerning the event to the FAA Office of Communications. The Office of Government and Industry Affairs and the Office of Communications depend on the Office of Safety for timely updates on all red and yellow events. Both offices should be provided the same information unless security or classification of data prevents its release.

c. Public release of information must be handled following FAA Order 8020.11, Chapter 10, and FAA Order 8020.16, Chapter 11, Public Release of Accident and Incident Information. The Office of Safety should not attempt to determine the ATO-derived data to be released, as the Senior Vice President of Operations, the Office of Government and Industry Affairs, the Office of Communications, the COO, and the Administrator will receive guidance from AGC and the ATO Litigation Support Office on these matters. Any data given to the FAA IIC are assumed to have been coordinated for release to the NTSB.

6-2. MEDIA REQUESTS

Media requests must be forwarded to the Office of Communications.

6-3. LITIGATION REQUESTS

During the investigative phase, the EIM must coordinate requests for discovery for records, documents, access to facilities, and access to witnesses through the ATO Litigation Support Office.

6-4. CONGRESSIONAL REQUESTS

All Congressional requests for records, documents, access to facilities, and other specific data must be forwarded to the FAA Office of Government and Industry Affairs and the COO.

6-5. OTHER REQUESTS

The release of any information to the NTSB or other non-FAA organizations must be approved by the Vice President of the Office of Safety or designee, who will ensure appropriate coordination with the Senior Vice President of Operations, the Office of Communications, the Office of Government and Industry Affairs, the COO, and the Administrator.

6-6. ROUTINE DISSEMINATION DURING THE INVESTIGATIVE PHASE

a. The Office of Government and Industry Affairs and the Office of Communications prefer that AAI is their source of information following all accidents and red events, and the Office of Safety must ensure that AAI (the FAA IIC) knows everything that the EIM feels is critical to relay to senior executives.

b. For all non-accidents and other red/yellow events, the Office of Safety must ensure that email notifications are transmitted to both the Office of Communications and the Office of Government and Industry Affairs within 1 hour of the first update to the Vice President of the Office of Safety or designee and the Senior Vice President of Operations.

(1) Email messages with preliminary information must be sent to the to the Assistant Administrator for Government and Industry Affairs (AGI-1) with copies to Congressional Liaison at 'AWA-AGI-STAFF@faa.gov

and to the Deputy Assistant Administrator for Public Affairs (AOC-2A) with a copy sent to the Manager of Media Relations (AOC-100).

(2) Subsequent emails must be sent as appropriate.

c. The Office of Safety must ensure that the same data regarding all events are provided to the Senior Vice President of Operations, the COO, and the Administrator in a timely manner.

d. The Office of Safety may determine the (ATO-derived) data that are available for release to the Office of Communications and the Office of Government and Industry Affairs after coordinating with the Senior Vice President of Operations, the COO, and the Administrator. Any data given to the FAA IIC are assumed to have been coordinated for release to the NTSB.

e. The Office of Safety must ensure that the Office of Communications and the Office of Government and Industry Affairs simultaneously receive the same data regarding all events. The Chief of Staff for the Administrator (or the Deputy Administrator) must coordinate data dissemination with the Office of the Secretary of Transportation.

Chapter 7. FAA Contract and Non-Federal Facilities

7-1. APPLICABILITY OF THIS ORDER

- a.** This order applies to FAA contract and non-federal facilities to the extent that the FAA has a responsibility to provide regulatory oversight to these facilities, and these facilities have event reporting requirements.
- b.** Controllers in FAA contract and non-federal facilities are not FAA employees. The FAA does not provide day-to-day supervisory control over the facility, even though the work is highly regulated. FAA contract and non-federal facilities have their own legal counsel and their own interests, legal and otherwise, and those interests may be different from the FAA's interests. At all times, the FAA should apply this order and other orders as a regulator providing oversight. FAA contractual rights with FAA contract towers or other contract facilities are not canceled by this order.
- c.** The Office of Safety must ensure that organizations providing contract air traffic services (for example, contract towers and contract flight service stations) receive this policy document, are offered briefings on the content of this document, and that the ATO's evaluations of their contract services include compliance with this policy.

7-2. SUPPORT LIMITATIONS TO FAA CONTRACT AND NON-FEDERAL FACILITY EMPLOYEES

FAA employees must not provide FAA contract and non-federal facilities with briefings on NTSB investigation practices, legal ramifications of services provided, or any other interaction that could be construed as supervisory in nature. Any questions concerning the scope of permissible support should be directed to the Assistant Chief Counsel for Litigation.

Appendix A. FAA Form 1030-1, On-site Event Review Checklist

1. General. This appendix contains the checklist the EIM and members of the ERT should use as a comprehensive (end-to-end) means of gathering data, planning for interviews and analysis, and keeping the Office of Safety, Directors of Operations, and ERT members informed throughout the event review process. EIMs should keep completed checklists until the conclusion of the event review to support the preparation of the investigative report.

2. Form Availability. EIMs will have access to this form electronically as a fillable PDF document.

3. Using a Fillable PDF.

a. When opening the document, click the “Highlight Fields” button at the top right-hand corner to highlight those fields that need to be filled in.

b. Boxes that require a date have a drop-down calendar. Simply select the date desired.

c. There is a “Print Form” button at the bottom of the form. Click this when the form is complete and it will go to the selected printer.

FIG A-1
On-Site Review Checklist

Activity	Date Completed or Verified
Pre-Arrival Activities:	
EIM must:	
• Complete the Data Request Form (including technical requests, if applicable) and send it to the Quality Assurance Investigations Manager.	_____
• Request information (e.g., facility contact information, past investigation history) from other investigators/evaluators in the mail group.	_____
ERT members (time permitting) must:	
• Read the preliminary event report.	_____
o <i>What information is missing?</i>	_____
o <i>What questions does the report raise?</i>	_____
• Review pertinent charts, approach plates, etc.	_____
• Review the facility's history of errors and incident processing.	_____
• Review available radar/voice/movie files.	_____
• Develop a list of questions.	_____
• Review all available data not obtained from the Data Request Form.	_____
o Technical. <i>ODS, NAS Technical Evaluation Program (past two), flight inspection reports, web Facility Service and Equipment Profile, TechNet, etc.</i>	_____
o Air Traffic. <i>Review the Air Traffic Quality Assurance database, the Facility Safety Assessment System, etc.</i>	_____
On-Site Activities:	
• Brief the facility manager on the purpose of your visit.	_____
• Receive an in-briefing from facility personnel on the circumstances surrounding the event.	_____
• Explain the ERT's planned activities.	_____
Data Review:	
• Preliminary event report	_____
• Voice recordings of communications	_____
• Computer data (<i>CDR printouts, National Track Analysis Program, Data Analysis and Reduction Tool</i>)	_____
• Applicable procedures, in particular special local procedures that pertain to the event	_____
• Facility procedures for reporting and investigating events	_____
Supervision:	
• Was the supervisor on duty and present in the operating area?	_____
• What were the supervisory activities/responsibilities at the time of the event?	_____
• What were the related actions pre- and post- event?	_____
• Is there a completed personnel statement?	_____

Activity	Date Completed or Verified
Staffing:	
• Position/sector/System Support Center (SSC) staffing at the time of the event	_____
• Normal and minimum staffing for the facility/area/SSC in which the event occurred	_____
• Staffing available for the shift	_____
• Accountability for available staffing at the time of the event (overtime/leave)	_____
• Status of available staffing (breaks, de-briefings, and other duties as assigned)	_____
Training:	
• Was training in progress (OJT, skill check, etc.) at the time of the event?	_____
• Did training contribute to the event?	_____
• How many total hours did the trainee have on the position?	_____
• What is the trainee's previous progress?	_____
• Was the instructor certified to conduct OJT?	_____
• Is the instructor's appraisal current?	_____
• What are the equipment certification responsibilities?	_____
Operational Data:	
• Controller time on position prior to the event	_____
• Traffic volume at time of the event	_____
○ <i>How was this determined?</i>	_____
• Traffic complexity	_____
○ <i>What were the determining factors?</i>	_____
• Traffic management initiatives/MAP in effect	_____
○ <i>Rationale or lack thereof</i>	_____
• Weather conditions	_____
• Were positions/sectors combined?	_____
○ <i>Was this justified?</i>	_____
○ <i>Was this a factor?</i>	_____
• Status of facility equipment	_____
○ <i>Did suboptimal performance contribute to complexity?</i>	_____
○ <i>Equipment modifications</i>	_____
○ <i>Software updates</i>	_____
○ <i>Equipment availability (redundancy)</i>	_____
○ <i>Service availability</i>	_____
• Review operational responsibilities and jurisdiction boundaries	_____

Activity	Date Completed or Verified
Personnel Data:	
• Position/performance level (<i>Air Traffic Control Specialist /Certified Professional Controller IT/FLM/Staff/Developmental/Air Traffic Manager/Airway Transportation System Specialist</i>)	_____
• Total time certified on position/equipment of the event	_____
• Air Traffic Control Specialist background	_____
• Credential status	_____
• Review FAA Form 3120-4 and/or FAA Form 3400-3	_____
• Operational currency	_____
• Weekly work schedule (e.g., 3 rd day of 5)	_____
○ <i>Rotation</i>	
○ <i>Was the controller working overtime?</i>	
○ <i>Leave use</i>	
• Review proposed Return to Duty Plan	_____
Interviews:	
• After completing the preliminary investigation, interview all involved personnel (as necessary) to corroborate your findings. Conduct these interviews using the Air Traffic Control Specialist Interview Protocol and Sample Questions.	_____
• Interview any other personnel that can contribute to a more complete understanding of the event	_____
Supporting Material:	
• Obtain additional documentation to support your observations, assessment, and conclusions. This information is in addition to the data obtained through the Data Request Form.	_____
Reporting Requirements:	
• Report to the Vice President of the Office of Safety or designee, at least once each day, the findings of the ongoing event review.	_____
• Before leaving the facility, de-brief the Director of Operations and facility manager on the initial findings and possible recommendations of the event review.	_____
• Email an Exit Summary (to the Office of Safety Quality Assurance Director) at the completion of the on-site event review.	_____
• Submit a draft investigative report within 10 days.	_____
• Send copies of all data collected during the investigation, including Data Request Forms, appended forms, electronic media, etc., to AJS-3200.	_____

Appendix B. FAA Form 1030-2, Data Request Form

1. General. This appendix contains the checklist the EIM and members of the ERT should use whenever they determine that additional information is required to complete their event review. This form is in two sections:

a. Page 1 is completed for transmission to the organization possessing the data needed to complete the event review.

NOTE-

All pages are transmitted when completed.

b. The checklist pages contain the normal data types that routinely are used by the ERT members during their review.

(1) The left-hand column is completed by the EIM or ERT member(s) making the data request. Place a checkmark next to the required items.

(2) The date EIM or ERT member(s) making the data request completes the “Date Received column” once the data is received.

(3) When the EIM authorizes that data be shared with the IIC or another organization, the EIM or ERT member(s) may record the transfer in the far right-hand column.

c. EIMs should keep completed checklists until the conclusion of the event review to support the preparation of the investigative report.

2. Form Availability. EIMs will have access to this form electronically as a fillable PDF document.

3. Using a Fillable PDF.

a. When opening the document, click the “Highlight Fields” button at the top right-hand corner to highlight those fields that need to be filled in.

b. Boxes that require a date have a drop-down calendar. Simply select the date desired.

c. For the field that requires a time, type in the four-digit military time and the entry will convert to a standard AM/PM format. For example, “0300” converts to “3:00 AM,” but “1500” converts to “3:00 PM.”

d. For fields requiring a phone number, type in the ten-digit number without punctuation and the entry will convert to the standard phone number format. For example, “20226773003” converts to “(202) 267-3003.”

e. There is a “Print Form” button at the bottom of the form. Click this when the form is complete and it will go to the selected printer.

FIG B-1
Data Request Form

To:

From: Air Traffic Organization – Office of Safety, Quality Assurance

Event: _____ **Event**
Date: _____

Description of Support Requested:

Requesting the following items to be available upon arrival on
[date] at approximately [time] local

Event Investigation Manager

Name: _____ **Office:** [number]

Location: _____ **Cell:** [number]

Please supply or arrange for two (2) copies of the items checked on the following pages.

FAA Office of Safety Requesting Representative:

_____ **[name]** _____ **Date:** _____

Required (✓)	Item	Date Received	Provided To:
<u>GENERAL</u>			
	In-brief (to be provided by the facility)		
	Voice tapes – working copy		
	Radar data		
	ASDE-3/AMASS/ASDE-X replay file		
	Draft chronological summary of events		
	Movie file (Camtasia, Captivate; if available)		
	Transcripts – draft (if available)		
	Significant Event Report (SER)		
<u>PERSONNEL</u>			
	3120s, Training Jackets		
	eLMS, review 3400-3		
	ATC Medical Clearance (cover memo)		
	Employee credentials		
	Personnel statements		
	Personnel work schedules		
	Return to Duty Plan		
<u>AIR TRAFFIC/FACILITY ENVIRONMENT</u>			
	Applicable charts/plates		
	Airport Diagram		
	Facility SOP/local orders and directives		
	Applicable Letters of Agreement		
	Video map/EOVM		
	Control room/cab layout diagram		
	Last two Facility Audits		
	Facility/Area binders- MBI, R&I, etc.		
	ATC Facility Tour		
	Airfield Tour		
<u>DOCUMENTS – ACCIDENT/INCIDENT SPECIFIC</u>			
	8020-9, Report of Accident		
	8020-3, Accident Notification		
	8020-6, Report of Aircraft Accident		
	7230-4, Facility Daily Record of Operation		
	7230-3, Personnel Log		
	7230-10, Position Log		
	Flight inspection reports (previous two)		
	7210-2, Preliminary OE/OD Investigative Report		

Required (✓)	Item	Date Received	Provided To:
	Incident Report (PD, VPD, NMAC, etc.)		
	Post-event MBI		
	6000 series TPRs (12 months)		
	Event ticketing		
	Simplified Automated Logging (SAL) export file		
	Reference data for equipment involved		
	Joint Acceptance Inspection Report		
	Radio Frequency Interference (RFI) Reports		
	FAA Order 8020.11b, Figure 4-2 (AFAAR report)		
	System's Built In Test (BIT) and System Logs		
	Facility engineering drawings (schematics, blueprints)		
	Related UCRs/Discrepancy Reports		
<u>EQUIPMENT</u>			
	Copy ARTS/STARS Optical Disk or DAT		
	Verify ARTS clock (GPS, CTS or WWV time source)		
	CDR keyboard entries/interfacility messages		
	DSR MDM status		
	DARC/CENRAP/ etc. status		
	MIA/MVA/Class B map		
<u>WEATHER/FLIGHT PLAN</u>			
	Weather Sequence/ATIS/ASOS/AWOS		
	ASOS/AWOS five mins. +/- one hour ("Archive")		
	PIREPs/Field condition reports		
	NOTAMs/Letters to Airmen		
	Flight plan record/AFSS event reconstruction		
	DUATS/vendor flight plan info		
	Tower Visibility Chart		
	LLWAS record		
	Flight Progress Strips		
	Applicable SIGMETs/AIRMETs/CWA		
<u>OTHER</u>			

Appendix C. Form 1030-3, NTSB Checklist

1. General. This appendix contains the checklist the EIM and members of the ERT should use whenever the NTSB is conducting their independent investigation into the event. The checklist is divided into two sections:

- a.** The first half is designed for the arrival of the EIM and those activities that should be completed prior to arrival of the NTSB.
- b.** The second half of the checklist covers the joint activities involving the members of the NTSB investigative team once they arrive.
- c.** EIMs should keep completed checklists until the conclusion of the event review to support the preparation of the investigative report.

2. Form Availability. EIMs will have access to this form electronically as a fillable PDF document.

3. Using a Fillable PDF.

- a.** When opening the document, click the “Highlight Fields” button at the top right-hand corner to highlight those fields that need to be filled in.
- b.** Boxes that require a date have a drop-down calendar. Simply select the date desired.
- c.** There is a “Print Form” button at the bottom of the form. Click this when the form is complete and it will go to the selected printer.

FIG C-1
NTSB Checklist

Activity	Date Completed
EIM Arrival at Air Traffic Facility	
Introduce yourself and the ERT members to the facility ATM.	_____
ERT members and organizations.	_____
NTSB Air Traffic Group members and organizations.	_____
Establish contact with the Director(s) of Operations for the service unit(s) involved in the event.	_____
Conduct an initial briefing for the facility management team.	_____
<ul style="list-style-type: none"> Participants are at the discretion of the ATM. 	_____
Briefly explain the process and protocol for the investigation/review.	_____
Explain transfer of data to/from the NTSB & your personal role as EIM.	_____
Ascertain what data is currently available (tapes, transcripts, ATCS statements, etc).	_____
Request a briefing of the event for the NTSB Air Traffic Group.	_____
Request point of contact (POC) for acquisition of data & coordination.	_____
Request a room of sufficient size for the NTSB Air Traffic Group -- room needs electrical outlets for laptop computer plug-in and must be private so that the room's occupants cannot be overheard or disturb other offices with their activities.	_____
Request a room of sufficient size to accommodate the one-on-one witness preparation -- should be able to accommodate 4 persons; room must be a private space, (not a common break or lunch room).	_____
Discuss availability/schedule of FAA personnel expected to be interviewed by the NTSB Air Traffic Group.	_____
Assure manager that you will keep him/her apprised of relevant information that affects them on a daily basis, and that a summary briefing will be provided upon the final departure of the NTSB Air Traffic Group.	_____
Conduct a meeting with the ERT members.	_____
<ul style="list-style-type: none"> Assure that members are familiar with the investigative protocols and your expectations. 	_____
NTSB Arrival at Air Traffic Facility	
Meet and greet as the POC for the facility and the ATO.	_____
Introduce NTSB Chairman to the facility ATM.	_____
Show NTSB to conference room, other facility rooms, & emergency egress routes.	_____
Do not permit the NTSB group to enter the operational quarters of the facility without an appropriate FAA escort.	_____

Appendix D. Air Traffic Control Specialist Interview Protocol and Sample Questions

Use the following protocol and questions when conducting interviews during an event review.

1. Interview Protocol:

- a. Provide the interviewee with a copy of FAA Order JO 7210.56, appendix 9.
- b. Permit one representative of the interviewee's choosing to be present; the representative may not respond to any questions.
- c. Introduce team members and explain the interview process.
- d. Instruct all participants to turn off cellular phones.
- e. Use the sample questions below to gain information helpful to the event review. One interviewer should ask questions at a time.
- f. Take copious notes (all event response team [ERT] members).
- g. Offer the opportunity for additional feedback.

IMPORTANT: If the interviewee discloses information that may lead to disciplinary action,
end the interview and advise facility management.

2. Sample Interview Questions:

- a. What is your position of record?
- b. Chronologically list your FAA experience (including all positions held).
- c. For what positions/sectors or equipment do you hold certifications?
- d. Do you have any staff or support specialist time?
- e. Are you a pilot?
- f. What ratings (for example, private, commercial, and/or instrument) do you hold?
- g. What positions/equipment did you work that day?
- h. What position were you assigned to at the time of the incident?
- i. Do you stand or sit when working operational positions?
- j. Are you an on-the-job training (OJT) Instructor?
- k. How often do you perform OJT?
- l. Did you have any prolonged work periods that day?
- m. Was there anything unusual going on in the facility that day (for example, equipment outages, distractions in the operating quarters or equipment area, construction, inspections, scheduled outages)?
- n. Were there any unusual operating configurations?
- o. How busy was the facility that day?
- p. Did you ask for assistance?
- q. Was traffic normal?
- r. Were there any weather deviations?
- s. Have you ever been involved in any incidents?

- t.** What are the requirements for pilot report solicitation?
- u.** How is this information disseminated?
- v.** How are significant meteorological information and airmen's meteorological information handled?
- w.** What are the posting requirements at the sector?
- x.** What is the phraseology for precipitation dissemination?
- y.** What are the levels of precipitation?
- z.** What is your responsibility in advising the pilot about weather?
- aa.** In the last 12 months, what has the facility done to emphasize the importance of weather?
- bb.** Do you use memory joggers? If so, what are they?
- cc.** Do you use a position relief checklist?
- dd.** What was the noise level in the area?
- ee.** How are distractions handled by the front-line manager?
- ff.** In your own words, describe the sequence of events as best you can recall them?

NOTE-

Questions found here are notional subjects that may become part of any event review. These questions are not intended to be comprehensive or to steer the ERT members or the event investigation manager.

Appendix E. Technical Investigation Checklist

The following list of questions is to be used when conducting an investigation where a National Airspace System (NAS) system or service contributed to an air traffic control event. This questionnaire will be completed by conducting interviews with airway transportation system specialists, air traffic controllers, operations control center (OCC) specialists, and managers.

1. Was the system in service during the time of the event?
 - a. If not, was the system out of service due to scheduled or unscheduled maintenance?
 - b. Was a notice to airmen issued to document the outage?
 - c. Was there a redundant system or service available?
2. At the time of the event, was the equipment/system operating as intended?
 - ★ If not, please describe.
3. Did air traffic personnel or the appropriate OCC/service operations center (SOC) call the system out of service before the event?
4. Did weather or any other catastrophic event contribute to this outage?
5. When was the last system certification performed and documented?
 - ★ Are there trends found in the certification records?
6. When was the last unscheduled outage?
 - a. How was the outage reported (remote monitor, loss of service to air traffic or user, etc)?
 - b. What was the duration of the outage?
 - c. What was the cause of the outage (power failure, component failure, etc.)?
 - d. Was there a recent similar outage or trend?
 - e. Was the cause code documented correctly in the RMLS/SAL?
 - f. Was the restoration code documented correctly?
 - g. Was the outage properly closed by the appropriate OCC/SOC?
 - h. Was there sufficient documentation in the RMLS/SAL describing the troubleshooting, repair, and restoration of the facility?
 - i. Was a certification made after maintenance and before the system was returned to service?
7. When was the last scheduled outage?
 - a. What was the duration of the outage?
 - b. Did the outage occur for scheduled periodic maintenance or some other scheduled event (runway construction, system upgrades, software updates, etc.)?
 - c. Was the outage properly coordinated by the airway transportation system specialist?
 - d. Was the outage properly documented by the OCC/SOC?
 - e. Was there sufficient documentation in the Remote Monitoring and Logging System (RMLS)/Simplified Automated Logging (SAL) describing the reason for the outage and the events involved with closing this issue?
 - f. Was a certification made after maintenance and before the system was returned to service?
8. Facility Reference Data.
 - a. Are all required data available?
 - b. Are all available data correct?

9. Technical Performance Records (TPR).

- a. Was a TPR established/available during the incident?
- b. Is the TPR comprehensive following FAA orders and policies?
- c. Is the trend for required TPR entries correctly documented?
- d. Are 2 years of records established?

10. Scheduled Maintenance.

- a. Is scheduled maintenance documented correctly in the RMLS/SAL?
- b. Is a full complement of maintenance scheduled following FAA orders?
- c. Has all required scheduled maintenance been performed and documented as completed?

11. NAS Performance Analysis System Data

- a. Was this system or service on the poor performer list?
- b. Was the system or service operating within range of the national average?

NOTE-

Questions found here are notional subjects that may become part of any event review. These questions are not intended to be comprehensive or to steer the event response team members or the event investigation manager.

Appendix F. Technical Operations Services Aircraft Accident Representative (AFAAR) Responsibilities

The AFAAR is responsible for decisions related to the operational condition of facilities that may have been involved in an event.

When notified of an event, the AFAAR and Air Traffic Organization (ATO) personnel responsible for air traffic services promptly develop a list of facilities/equipment/systems that may have been involved in the event for consideration during the investigation or review. Because some events are due to aircraft-related trouble (for example, fuel exhaustion, nose-wheel collapse, vehicle strikes navigation aid, engine-generator fire), the AFAAR may not always require input from the ATO when making these decisions. This list is reduced by defined principles, based on the circumstances surrounding the event, to a minimum list of facilities/equipment systems. These facilities/equipment systems are then either removed from service or deemed appropriate to remain in service due to operational assessments, based on the decision of Technical Operations Services and ATO personnel responsible for air traffic services and Technical Operations.

The AFAAR determines the activities necessary to return each facility/equipment system to service—typically certification, flight inspection, or a combination of these—and advises the Operations Control Centers (OCC) for implementation by field personnel. The OCC provides the status of activities to all concerned entities. An incident/accident package containing appropriate facility documentation is assembled and distributed.

(See Federal Aviation Administration Order 8020.16 for detailed responsibilities for the AFAAR and Technical Operations Services.)

Appendix G. Selection Criteria for the EIM and ERT Members

1. Selection Criteria for the Event Investigation Manager (EIM). To ensure that the policies in this order are executed as smoothly as possible, the Vice President of the Office of Safety will select the very best personnel in the Air Traffic Organization (ATO) to serve as EIMs. These individuals must have demonstrated:

a. Knowledge of:

- (1) Safety principles.
- (2) Risk identification.
- (3) Risk behaviors found in other accidents
- (4) Human behaviors.
- (5) Air traffic regulations and standards.
- (6) Air traffic control procedures and techniques.
- (7) Air traffic automation systems.
- (8) Labor contracts.
- (9) Data sources.

b. Skills, including:

- (1) Analytical problem solving.
- (2) Persistence and dedication to creating a safer culture.
- (3) Leadership of small teams.

c. Ability to:

- (1) Deal well with others.
- (2) Solve organizational problems.
- (3) Write documents and conduct briefings.
- (4) Regularly connect insignificant facts to reach conclusions.
- (5) Motivate others to be efficient and effective members of a team.

d. Experience:

- (1) Previous success as an EIM or member of an event response team (ERT).
- (2) As a team lead for significant air traffic investigation.
- (3) As a Federal Aviation Administration Investigator-in-Charge (IIC) and/or supporting an IIC.
- (4) Writing and briefing senior executives.

2. Training. New EIMs must receive accident investigations training, participate in briefings provided by Office of Accident Investigation, and receive on-the-job training during at least two on-site event reviews as ERT members.

3. Selection Criteria for ERT Members. To complement the EIMs, and to ensure that investigative reviews of events are conducted effectively and efficiently, executives of the operational service units will nominate candidates to be ERT members on an annual basis. ERT candidates are nominated based on the criteria listed here and on the operational needs of the service unit. Service units must arrange for the availability and travel associated with each ERT candidate selected to serve. ERT candidates must have demonstrated:

a. Knowledge of:

- (1) Relevant regulations and standards.
- (2) The physical limits of systems and human operators.
- (3) Safety principles.
- (4) Risk identification.
- (5) Risk behaviors found in other accidents.
- (6) Human behaviors.
- (7) Data sources.

b. Skills, including:

- (1) Analytical problem solving.
- (2) Persistence and dedication to creating a safer culture.
- (3) Cooperation as part of a team.

c. Ability to:

- (1) Support others in difficult, high-pressure situations.
- (2) Write documents and conduct briefings.
- (3) Regularly troubleshoot systems and/or human workplace situations.

d. Experience:

- (1) Previous success as a member of an ERT or investigative team.
- (2) Working at remote locations without support staff.

4. Selection Criteria Modification. As the organization gains experience with the processes outlined in this order and as ATO managers become more confident that following the processes will lead to repeatable successes, the criteria outlined in this appendix may be modified.

Appendix H. Outline of Investigative Report

To ensure that important findings and recommendations of the Event Investigation Manager (EIM) and the event response team (ERT) are recorded and available for retrieval, the EIM will submit a report that includes the following topics, at a minimum:

1. Executive Summary. A brief summary (no details).

2. Introduction.

- a. Reason for investigation.
- b. EIM introduction and ERT members.

3. Investigation.

- a. History of the Event.
- b. Data gathering and analysis completed.

4. Summary of Findings.

- a. Data collected during the on-site team activities.
- b. Data gathered from other sources.
- c. Data that could not be recovered or analyzed.

5. Recommendations.

- a. From the operational service unit.
- b. From the EIM and ERT.

6. Corrective Actions.

- a. Completed at time of report.
- b. Underway but not yet completed.

Appendix I. Acronyms

AAI	Office of Accident Investigation
AFAAR	Technical Operations Services Aircraft Accident Representative
AGI	Office of Government and Industry Affairs
AIRMET	Airmen's meteorological information
AJS	Office of Safety
AMASS	Airport Movement Area Safety System
AOC	Office of Communications
AOMC	ASOS Operations and Monitoring Center
AOV	Air Traffic Safety Oversight Service
ARTS	Automated Radar Terminal System
ASDE	Airport Surface Detection Equipment
ASOS	Automated Surface Observing System
ATC	Air traffic control
ATIS	Air Traffic Information Service
ATO	Air Traffic Organization
ATREP	Air traffic representative
AWOS	Automated Weather Observation System
BIT	Built-in test
CENRAP	Center Radar ARTS Presentation/Processing
CDR	Continuous data recording
COO	Chief Operating Officer
CTS	Coded time source
CWA	Center weather advisory
DALR	Digital Audio Legal Recorder
DARC	Direct Access Radar Channel
DAT	Digital audio tape
DEN	Domestic Events Network
DH	Decision height
DME	Distance measuring equipment
DOT	Department of Transportation
DSR	Display System Replacement
DUATS	Direct User Access Terminal Service
EIM	Event Investigation Manager
eLMS	electronic Learning Management System
EOVM	Emergency Obstruction Video Map
ERT	Event response team
FAA	Federal Aviation Administration
FLM	Front line manager
FMS	Flight Management System
FOIA	Freedom of Information Act
FSDO	Flight standards district office
FSOC	Flight Service Operations Center
FSS	Flight service station
GAO	General Accountability Office

GNSS	Global Navigation Satellite System
GPS	Global Positioning System
IFR	Instrument flight rules
IIC	Investigator-in-charge
ILS	Instrument landing system
IMC	Instrument meteorological conditions
KSN	Knowledge Sharing Network
LAAS	Local Area Augmentation System
LLWAS	Low-Level Windshear Alert System
LMFS	Lockheed Martin Flight Service
LNAV	Lateral navigation
MAP	Monitor alert parameter
MBI	Mandatory Briefing Item
MDA	Minimum descent altitude
MDM	Main display monitor
MEARTS	Microprocessor En Route Automated Radar Tracking System
MIA	Minimum IFR altitude
MLS	Microwave landing system
MVA	Minimum vectoring altitude
NAS	National Airspace System
NATCA	National Air Traffic Controllers Association
NDB	Non-directional beacon
NMAC	Near-midair collision
NNCC	National Network Control Center
NOCC	National Operations Control Center
NOP	National Offload Program
NOTAM	Notice to airmen
NSSE	National special security event
NTSB	National Transportation Safety Board
NWS	National Weather Service
OCC	Operations control center
OD	Operational deviation
ODALS	Omni-directional approach lighting system
ODS	Optical disk storage
OE	Operational error
OIG	Office of the Inspector General
OJT	On-the-job training
PAPI	Precision approach path indicator
PD	Pilot deviation
PIREP	Pilot report
PPB	Plot playback
QA	Quality Assurance
QCG	Quality Control Group
R&I	Read and initial
RCAG	Remote center air-ground
REIL	Runway end identifier lights

RFI	Radio frequency interference
RMLS	Remote Monitoring and Logging System
RMM	Remote maintenance monitoring
ROC	Regional operations center
RVR	Runway visual range
SAL	Simplified Automated Logging
SATORI	Systematic Air Traffic Operations Research Initiative
SER	Significant event report
SIGMET	Significant meteorological information
SOC	Service operations center
SOP	Standard operating procedures
SSC	System support center
STARS	Standard Terminal Automation Replacement System
TACAN	Tactical air navigation
TDWR	Terminal Doppler weather radar
TFR	Temporary flight restriction
TPR	Technical performance record
U.S.C.	United States Code
UCR	Unsatisfactory condition report
VASI	Visual approach slope indicator
VMC	Visual meteorological conditions
VNAV	Vertical navigation
VOR	Very high frequency omni-directional range
VPD	Vehicle/pedestrian deviation
VRS	Voice recording system
WAAS	Wide Area Augmentation System
WOC	Washington Operations Center
WWV	[radio station at Fort Collins, CO that broadcasts time information]