

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION Air Traffic Organization Policy

JO 7210.56C CHG 2

Effective Date: July 20, 2009

SUBJ: Air Traffic Quality Assurance

- **1. Purpose of This Order**. This change transmits revised pages to Federal Aviation Administration Order (FAAO) JO 7210.56C, Air Traffic Quality Assurance.
- **2. Audience**. This notice applies to the following Air Traffic Organization (ATO) service units: En Route and Oceanic, Terminal, System Operations; The Office of Safety, The Office of the Service Center; all air traffic control facilities, all federal and non-federal contract facilities.
- **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/.
- **4. Explanation of Policy Changes.** In order to better assess risk in the National Airspace System, it is imperative that the ATO fully participate in full and open reporting and analyses of all appropriate safety data. As we continue to make improvements to our safety culture, we must ensure that we move toward a just culture in which blame is not associated with reporting of safety information and there is a significant focus on determining why events occur. This notice takes a significant step in that process by disassociating specific employee identification with reported operational errors/deviations and proximity events. References to employee identification, training record entries, performance management, and return-to-duty actions that have been historically tied to reported events are removed from FAAO JO 7210.56C by this notice. Facility managers are still expected to address observed and documented performance; however, this is an important step in de-coupling such performance management from safety data reporting. In addition, significant changes have been made to the time requirements for reporting operational errors and deviations. Most errors and deviations will be reported the next administrative day instead of within the current 4-hour time frame. This change is being made to reduce the workload of reporting within the operational environment and allows operational personnel to remain focused on the task at hand. It also demonstrates the intent to reduce our organizational focus on individual incidents and move toward a systemic risk-analysis based approach to safety.
- **5. Distribution**. This notice is distributed to the following Air Traffic Organization (ATO) service units: En Route and Oceanic, Terminal, System Operations; the Office of Safety, the Office of the Service Center; all air traffic control facilities; all federal and non-federal contract facilities; Air Traffic Safety Oversight; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.
- **6. Disposition of Transmittal.** Retain this transmittal until superseded by a new basic order.

7. Page Control Chart. See the page control chart attachment.

Robert Tarter

Vice President, Office of Safety

Air Traffic Organization

Date: JUL 1 3 2009

PAGE CONTROL CHART

7210.56C CHG 2

July 20, 2009

REMOVE PAGES	DATED	INSERT PAGES	DATED
Table of Contents iii through v	08/04/08	Table of Contents iii through iv	07/20/09
3-2	08/15/02	3-2	07/20/09
4-3 and 4-4	08/04/08	4-3 and 4-4	07/20/09
5-1 through 5-13	08/04/08	5-1 through 5-11	07/20/09
Appendix 2	08/15/02	Appendix 2	07/20/09
Appendix 4, Pages 3 through 10	08/15/02	Appendix 4, Pages 3 through 9	07/20/09
Appendix 5	08/15/02	Appendix 5	07/20/09
Appendices 9 through 12	08/15/02		
Appendix 13	08/04/08	Appendix 9	07/20/09
Appendix 14	08/04/08	Appendix 10	07/20/09
Appendix 15	08/04/08	Appendix 11	07/20/09
Appendix 16	08/04/08	Appendix 12	07/20/09

Air Traffic Control Explanation of Changes

Direct questions through appropriate facility/service center office staff to the Office of Primary Interest (OPI)

a. 3-1-4. DOCUMENTATION

Paragraphs b(2) and (3) were replaced so that there was no reference to an OE/OD or other reportable events during the TTD. References should only be made to the documented performance and associated training accomplished.

b. 4-1-3. QUALITY ASSURANCE REVIEW (QAR)

Paragraph i was deleted because the reporting requirements were consolidated in paragraph 5-1-5k and are covered in other directives.

c. 5-1-1. DEFINITIONS

The definition of Conformance Category (paragraph q) was modified to clarify that Conformance Categories are depictions of proximity outcome, not event severity.

This definition of Significant Event (paragraph r) was modified to coordinate with changes described below in OE reporting processes.

The definition of Training & Proficiency Record (paragraph t) was removed to clarify that OE/Ds are not to be entered into the employee's Training and Proficiency Records.

d. 5-1-3. INITIAL INVESTIGATIONS

Added verbiage in paragraph a to indicate that employees should only rarely be removed from an operational position pending the result of an OE/OD/PE investigation.

Paragraph b(4) was deleted because controllers need not be removed to conduct an OE/OD investigation.

e. 5-1-4. MULTIPLE LOSSES OF SEPARATION OR MULTIPLE DEVIATIONS DURING A SINGLE EVENT

The reference to employee performance in paragraph a was deleted since it has no bearing on reporting requirements.

Paragraph b was deleted because employees will no longer be identified on OE/OD reports.

f. 5-1-5. INVESTIGATIVE PROCESS

Paragraphs b(1) through b(5) were replaced because there is no longer a requirement to interview employees in an OE/OD investigation.

Paragraph f was deleted because there is no longer a requirement to interview employees in an OE/OD investigation.

Paragraph I was amended to reflect the current title of the Office of Safety and changed to eliminate the four-hour time limit to report an OE/OD, leaving the four-hour reporting requirement and telephonic notification in-place for surface errors and significant events.

Paragraph n was deleted because employees will not be required to be interviewed. Additionally, training is covered in another paragraph.

Paragraph r was reworded to reflect that there is no longer a requirement to identify any involved specialists.

Paragraph s was changed to reflect the correct fax number.

E of C-1 Explanation of Changes

g. 5-1-6. ATM RESPONSIBILITIES

Paragraph a(4)(b) was deleted because employees will no longer be identified in the report.

h. 5-1-8. PERFORMANCE BASED ACTIONS

This section was reworded to indicate that training should be accomplished IAW agency directives and the CBA. The specific performance steps in this section were eliminated. In addition, the provisions of N JO 7210.707, *Participation in Voluntary Safety Event Reporting*, were incorporated.

i. 5-1-9. RETURN TO OPERATIONAL DUTY

5-1-10. WHEN THE AIR TRAFFIC MANAGER IS INVOLVED 5-1-11. FOLLOW-UP PERFORMANCE SKILL CHECK 5-1-12. SKILL ENHANCEMENT TRAINING

These paragraphs were deleted to reflect that individuals are not named in the OE/OD report and that training should be accomplished IAW agency directives and the CBA.

j. 5-1-13. FINAL REPORTS

Since no employees will be identified in the report, paragraph b was changed to delete the references to providing the employee a copy of Part I & II. The section was also changed to delete the manager's consideration of the employee's comments.

Paragraph c has been changed to remove the reference to the employee's statement.

Paragraph e was deleted because employees will no longer receive a copy of Part III of the report.

k. 5-1-14. ENTRIES IN TRAINING & PROFICIENCY RECORD (FAA Form 3120-1)

This section was changed since OE/OD data will no longer be entered into the employee's training records.

l. 5-1-16 FACILITY, HEADQUARTERS & SERVICE UNIT RESPONSIBILITIES

Paragraph a(3) was deleted to indicate that training should be accomplished IAW agency directives and the CBA.

m. Appendix 2. Instructions for FAA Form 7210-2

Block 13a is changed. The last six numbers of an employee's SSN are no longer to be entered into the form.

Block 13e is changed. The date of the last certification is no longer to be entered into the form.

Block 13f is changed. The previous OEs/ODs are no longer to be entered into the form.

n. Appendix 4. Instructions for FAA Form 7210-3

The instructions were changed to leave Blocks 11-22, 28, 31, and 37 blank.

The verbiage in Blocks 23-27, 29-30, 32-34, 39-40, 61, and 69 was changed to eliminate reference to any employee.

The requirement in Block 65 to explain why the controller did not maintain separation was removed. The examples were removed due to the references to particular employees.

The instructions and example in Block 68 were changed to enter all causal factors under column "A" only without reference to any employee.

The examples were deleted due to the references to particular employees.

Explanation of Changes E of C-2

o. Appendix 9. Interview Statement and Participating in Post Incident Investigations

The appendix was deleted since it is a restatement of what is contained in the Human Resource Policy Manual (HRPM). While interviews may still be conducted, the intent is to gather important safety data. Employees are aware of their responsibility to cooperate with all investigations as the Standards of Conduct are briefed yearly per the FAA/NATCA CBA.

p. Appendix 10. General Reporting Procedures

The appendix was deleted since it was a repetition of reporting requirements that are contained elsewhere.

q. Appendix 11. Air Traffic Incident Handling Procedures

The appendix was deleted since it was a repetition of reporting requirements that are contained elsewhere.

r. Appendix 12. Data Retention

The appendix was deleted because it contained outdated information.

s. Appendix 16. FAA Form 7210-6

The verbiage for Block 12 was changed to eliminate reference to the controller.

E of C-3 Explanation of Changes

Table of Contents

Chapter 1. General

Paragr		Page
	PURPOSE	
	DISTRIBUTION	
	CANCELLATION	
	EXPLANATION OF CHANGES	
	EFFECTIVE DATE	
	RELATED PUBLICATIONS	
	USE OF TERMS	
1-1-8.	SCOPE	1-5
	Chapter 2. Quality Assurance (QA) Programs	
2-1-1.	OVERVIEW	2-1
2-1-2.	RESPONSIBILITIES	2-1
2-1-3.	PROGRAM CONTENT	2-2
	Chapter 3. Technical Training Discussions	
3-1-1.	OVERVIEW	3-1
3-1-2.	DEFINITIONS	3-1
3-1-3.	RESPONSIBILITIES	3-1
3-1-4.	DOCUMENTATION	3-2
	Chapter 4. Air Traffic Incidents	
	DEFINITIONS	
	GENERAL HANDLING PROCEDURES	
	QUALITY ASSURANCE REVIEW (QAR)	
	EMERGENCIES	
	FLIGHT ASSISTS	
	MILITARY FACILITY DEVIATIONS	
	SPILL OUTS	
	AIRSPACE INTRUSIONS	
	INVALID MODE C REPORTING	
4-1-10). SURFACE INCIDENTS AND RUNWAY INCURSIONS	4-6
	Chapter 5. Air Traffic Operational Errors and Deviations, Investigation	ıs
	and Reporting	
	DEFINITIONS	
	SUSPECTED EVENT	
	INITIAL INVESTIGATIONS	5-2
5-1-4.	MULTIPLE LOSSES OF SEPARATION OR MULTIPLE DEVIATIONS DURING	
r 1 r	A SINGLE EVENT.	
	INVESTIGATIVE PROCESS	
	ATM RESPONSIBILITIES	
J-1-/.	RECLASSIFICATION	3-/

Paragraph 5-1-8. PERFORMANCE BASED ACTIONS	Page 5.7
5-1-9. FINAL REPORTS	
5-1-10. ENTIRES IN TRAINING AND PROFICIENCY RECORD (FAA Form 3120-1)	
5-1-11. DOCUMENTATION RETENTION	
5-1-12. FACILITY, HEADQUARTERS & SERVICE UNIT RESPONSIBILITIES	
5-1-14. ANALYSIS & FOLLOW-UP ACTIONS	
Chapter 6. Conformance Categories	
6-1-1. DEFINITIONS	6-1
Chapter 7. Operational Error Detection Program (OEDP)	
7-1-1. EN ROUTE OPERATIONAL ERROR DETECTION PROGRAM (OEDP)	
Chapter 8. Terminal/TRACON Audit Process for Operational Errors & Operational Deviations	
8-1-1. BACKGROUND 8-1-2. FACILITY AUDIT PROCESS	
8-1-3. SAFETY ASSURANCE OFFICE RANDOM AUDIT	
Appendices	
Appendix 1. Radar Data Processing	
Appendix 2. Instructions for FAA Form 7210-2, Preliminary Operational Error/Deviation Investigation Report	
Appendix 3. Example of FAA Form 7210-2, Preliminary Operational Error/Deviation Investigation Report	
Appendix 4. Instructions for FAA Form 7210-3, Final Operational Error/Deviation Report	
Appendix 5. Example of FAA Form 7210-3, Final Operational Error/Deviation Report	
Appendix 6. Instructions and Example for FAA Form 7210-5, Operational Error/Deviation Classification Report	
Appendix 7. Instructions for FAA Form 7210-6, Flight Assist Report	
Appendix 8. Example of FAA Form 7210-6, Flight Assist Report	
Appendix 9. Non-Wake Separation Conformance Categorization	
Appendix 10. Separation Conformance Classification Tool	
Appendix 11. Conformance Categorization Tables	
Appendix 12. Proximity Event Investigative Report Form	

CHAPTER 3. TECHNICAL TRAINING DISCUSSIONS

3-1-1. OVERVIEW

To provide for the continuous enhancement of technical proficiency and correction of any performance deficiencies in the air traffic workforce, individualized training requirements for technical performance must be identified and accomplished. FAA Order 3120.4 provides direction on technical proficiency training that shall be followed in accomplishing the procedures contained in this chapter.

Technical Training Discussions (TTD's) are intended to provide formal feedback from first-level supervisors regarding an employee's proficiency and to develop plans to enhance their development as appropriate. TTD's are not intended to be viewed as "pass/fail", "satisfactory/unsatisfactory", to discuss issues of conduct, nor employee performance in areas outside of air traffic control. TTD's are not intended to be based upon a single, "snapshot" observation, but rather a summary of observations by the employee's first-level supervisor, the employee, or other supervisors/staff specialists within the work unit, since the previous TTD. In preparation, supervisors should document in their supervisory notes their own observations, along with those forwarded by others, as well as formal documentation such as QAR's, or operational errors.

EXAMPLE-

Some technical areas that may be addressed: Phraseology, Interphone Usage, Emergency Handling, and Impact of Actions, Coordination, Sequencing, Speed Control (ground speed vs. indicated airspeed), Application of Visual Separation, Application of Visual approaches, etc.

3-1-2. DEFINITIONS

- **a.** Proficiency: Knowing, understanding, and applying air traffic procedures in a safe and efficient manner.
- **b.** Performance: The act of operating in a proficient manner.

3-1-3. RESPONSIBILITIES

- **a.** The first-level supervisor shall accomplish the following for each of their employees who are certified on at least one operational position:
- (1) Continuously assess the employees' technical proficiency through both direct and indirect methods. Think of the TTD as a means of addressing not only performance deficiencies, but a means of addressing performance *improvement* as well. Indirect methods may include remote monitoring, tape reviews,

Continuous Data Recording (CDR) playback, Radar Audio Playback Terminal Operations Recording (RAPTOR), the Systematic Air Traffic Operational Research Initiative (SATORI), and any other playback tool that may be available.

NOTE:

SATORI/RAPTOR combines radar data recorded in the HOST/ARTS/STARS/EARTS computer system and digital voice recordings for a visual and audio display of information. This allows review of aircraft and air traffic situations within requested time and airspace parameters. SATORI/RAPTOR may be used as a "lessons learned" performance management tool to recreate the events that contributed to an OE/OD, incident, accident, or other operational scenarios.

(2) Using the appropriate job functions and indicators described in FAA Order 3120.4 as a guide, develop and direct individualized proficiency training as appropriate.

NOTE:

Technical performance issues consist of areas of knowledge and application that might benefit from training. These issues are not necessarily areas of deficiency. An employee may demonstrate overall acceptable technical proficiency, but might benefit from technical training in the application of a particular skill or task.

- (3) At least once every six months, conduct technical training discussions about the employees' individualized proficiency and any assigned training that has been accomplished, since the last TTD, and/or will be conducted to address technical proficiency issues in the near future. If no new technical proficiency issues have been identified, a documented discussion shall still take place to advise the employee of this and of regional, national and/or facility trends. Additionally, these discussions shall be conducted:
- (a) Whenever the first-level supervisor identifies an area in an employees' technical proficiency that might benefit from individualized technical training.
- **(b)** No later than 6 months from the employees' previously documented technical training discussion.
- (c) No later than 60 days after the first-level supervisor assumes supervisory responsibility for an employee who has not had a technical training discussion documented during the previous 6 months.

Par 3-1-1 3-1

NOTE-

TTDs are intended to provide first-level supervisors a formal process to address or re-address identified proficiency issues and maintain a history of proficiency discussions.

- **(4)** Ensure all technical training identified is completed in a timely manner.
- (5) Ensure all discussions conducted under this chapter are documented as described in paragraph 3-1-4, Documentation.
- **b.** Certain first-level supervisors may be unable to observe their employees' technical proficiency on a regular, on-going basis. An example of such a situation might be supervisors who are not permanently assigned to the same facility as their employees, or supervisors whose span of supervision is so broad as to prohibit routine, meaningful observations of all their employees. The ATD Manager may waive the TTD requirements for employees in such cases, provided that alternative procedures are first established that ensure each employee receives regular, meaningful observation and feedback on their technical performance, and appropriate proficiency training. An example of such a program might be a process for peer review between en-route operations supervisors, with specific expectations for direct observations, feedback on areas for improved proficiency, and coordination of results with their immediate supervisors.
- **c.** Facility staff assigned quality assurance responsibilities shall:
- (1) At least once every 12 months complete a report, describing all technical training that was assigned and completed through the TTD process. This report shall be designed to allow the ATM to identify recurring and significant proficiency training needs in order to develop effective future facility training plans.
- (2) Notify the employee's first-level supervisor, in a timely manner, of any technical proficiency issues, which they identify through routine QA initiatives.

d. The ATM shall:

(1) Identify, in writing, facility proficiency training objectives and ensure those objectives are met.

- (2) Identify, in writing, facility technical performance trends and ensure appropriate follow-up action is completed.
- (3) Ensure that first-level supervisors have access to employees' training records, in the course of their official duties.
- **e.** The Employee may request and receive a tape of his/her own session to facilitate and assist self-development activities. The self-critique, if discussed with the employee's supervisor, may be included in the employee's technical training discussion.

3-1-4. DOCUMENTATION

- **a.** Each technical training discussion shall be documented in the employees' FAA Form 3120-4, Training and Proficiency Record, in accordance with FAA Order 3120.4.
- **b.** A record of discussion documenting the content of each TTD shall be retained in the facility's records for 1 year from the date of the discussion. FAA Forms 3120-25, -26, or -32 may be used as a guide and/or record of the discussion. The record of discussion shall contain the following:
- (1) Name and signature of the employee and the first-level supervisor conducting the discussion.
- (2) Any technical training that was assigned and completed through the TTD process since the previous discussion.
- (3) Discussion of trends such as OE/OD, facility evaluations, etc.
- (4) If no new technical proficiency issues have been identified, a documented discussion shall still take place.
 - (5) Date discussion was completed.

3-2 Par 3-1-3

4-1-3. QUALITY ASSURANCE REVIEW (QAR)

For the ATC system to be effective, it is essential that all system deficiencies be identified and corrected. Serious system deficiencies may be involved in air traffic incidents that fall outside of the definitions and corrective procedures for OE/ODs. QARs provide an opportunity for the identification, investigation, and resolution through corrective training of these identified deficiencies.

- **a.** Conduct a QAR for all of the following when air traffic control services are involved:
 - (1) Aircraft accidents.
 - (2) Air traffic incidents other than OE/ODs.

NOTE-

QARs are not required for incidents preliminarily identified as OE/ODs. As such reviews would be redundant to OE/OD investigative/corrective procedures (see Chapter 5, AT OE/OD Investigation and Reporting).

- (3) Traffic Alert and Collision Avoidance System (TCAS) Resolution Advisory (RA) Reports.
- (4) Operational Error Detection Program (OEDP) alert.
- (5) Other miscellaneous incidents or reports that involve a loss of separation.
- **(6)** Public inquiries regarding air traffic control services provided during a specific operation; e.g. flight crewmember, passenger, or media inquiries.
- (7) Interfacility traffic management initiatives that cause "NO NOTICE GROUND STOPS" or "NO NOTICE AIRBORNE HOLDING".

NOTE:

Both the initiating and receiving facilities shall conduct a review of these interfacility initiatives. The review shall include the causes and the effects of these initiatives.

b. Determine in a QAR whether employee performance, procedures, and/or equipment may have contributed to, increased the conformance of, or unreasonably failed to mitigate the initiating incident.

EXAMPLE-

[1] In review of a pilot deviation resulting in a runway incursion, determine whether a local controller's scanning of movement areas was adequate.

- [2] In review of an aircraft accident, determine whether an in-flight specialist's weather briefing to the involved pilot was adequate.
- [3] Determine whether a controller's radar vectors resulted in an instrument approach intercept inside the final approach fix.
- **c.** The ATM shall designate the personnel responsible for the conduct of QARs. This designation may be made on a permanent or ad hoc basis.
- **d.** Conduct the QAR in sufficient detail so as to assess the system performance with reasonable accuracy. The detail of a QAR may range from simply discussing the situation with the involved employees, to a full investigation that may include reviewing recorded radar data and voice communications from the incident (see paragraph 5-1-5a, Investigative Process, Fact Finding, for investigative sources to consider).
- **e.** The result of a QAR that involves an employee shall be communicated to the affected employee as soon as practical, normally the employees' next assigned shift and forwarded to the employees' first-level supervisor for review.
- **f.** Accomplish appropriate corrective training for all identified employee technical proficiency deficiencies. Training shall be administered in accordance with FAA Order 3120.4.

NOTE-

In cases of serious technical performance deficiencies, appropriate training may include decertification and remedial training if documented performance history warrants.

- **g.** Communicate the conclusions of the QAR, including those finding no employee performance deficiency, to the ATM.
- **h.** Record notification of the QAR initiating incident and conclusion of its review on FAA Form 7230-4, Daily Record of Facility Operation, in accordance with FAA Order 7210.3.
- i Notify the ATD through the ROC within 3 hours of the occurrence of all surface pilot deviations, vehicle runway deviations, "NO NOTICE GROUND STOPS", "NO NOTICE AIRBORNE HOLDING", and any other safety related incidents, regardless of whether standard separation was lost. This requirement is supplemental to the requirements contained in FAA

Par 4-1-3 4-3

Order 8020.11.

J Retain all suspected air traffic incidents (listed above) and supporting data that are investigated and determined to be a non-occurrence for 45 days.

NOTE-

Retain all supporting documentation including; certified re-recordings of the pertinent voice tapes, employee statements, and NTAP/CDR data in electronic format used to determine the event was a non-occurrence. Facilities that determine the event was a non-occurrence based on a printed NTAP or CDR Plot (i.e. significant target jump) shall retain both the original paper printout and an electronic copy.

4-1-4. EMERGENCIES

- **a.** When appropriate, make emergency notification using FAA Form 8020-3, Facility Accident/Incident Notification Record.
- **b.** Compile the information and document on FAA Form 7230-4, Daily Record of Facility Operation, the events, the notifications, and the termination of the emergency.
- **c.** Notify AAT-200, the ATD, and the appropriate FSDO through the ROC/WOC whenever:
- (1) The aircraft involved is an air carrier, a commuter, or an air taxi; or
- (2) The aircraft is carrying members of Congress or prominent persons; or
- (3) The emergency is or may become newsworthy by coming to the attention of the public or the news media.
- **d.** Prepare FAA Form 8020-11, Incident Report in accordance with FAA Order 8020.11. For significant emergencies (e.g., involving air carriers, air taxis, or prominent persons), immediately notify AAT-200, ATD ROC/WOC by telephone, and forward a preliminary report within 3 hours.

4-1-5. FLIGHT ASSISTS

a. Report instances where a pilot is provided in-flight assistance to the appropriate FSDO through the ROC within 3 hours of the occurrence. Obtain the information required to complete FAA Form 7230-6, Flight Assist Report, and include the pilot's name and address if obtainable. Instructions for completing FAA Form

7230-6, Flight Assist Report are contained in Appendix 7 Instructions for FAA Form 7230-6, Flight Assist Report.

- **b.** When another pilot helps in providing flight assistance, obtain the assisting pilot's name and address, via telephone, and include in Item 16 of FAA Form 7230-6, Flight Assist Report.
- **c.** Prepare FAA Form 7230-6, Flight Assist Report within 10 administrative days of the occurrence and include the following:
- (1) The pilot's name and address, if obtainable, in Item 16.
- (2) If the assistance was of an outstanding nature, enter the word "Outstanding" at the top center of the form.
- (3) If a pilot helps in providing assistance, include their name in Item 16.
- **(4)** Indicate in Item 16 when an FAA Form 8020-17, Preliminary Pilot Deviation Report, is filed as a result of a flight assist.
- (5) For outstanding flight assists, indicate in item 17 the name of the employee primarily responsible for the assist. All other names in item 17 will be considered as having provided additional assistance.

d. Pilot Recognition:

- (1) The ATM shall review the circumstances when a pilot aids in providing flight assistance. If appropriate, write a letter of recognition. Attach a copy to FAA Form 7230-6, Flight Assist Report.
- (2) When pilot assistance is of an outstanding nature, the ATD shall review the circumstances, and if appropriate, prepare a regional level letter of recognition.
- **e.** Distribute FAA Form 7230-6, Flight Assist Report as follows, and indicate on the original to whom the copies are routed:
 - (1) The original to the facility's files.
 - (2) The ATD.
 - (3) ATX-400.
 - (4) The FSDO.
 - (5) Others as determined by the ATD.
- **f.** Process Annual National and regional Outstanding Flight Assist Award as follows:

4-4 Par 4-1-3

CHAPTER 5. AIR TRAFFIC OPERATIONAL ERRORS AND DEVIATIONS, INVESTIGATION AND REPORTING

5-1-1. DEFINITIONS

- **a. Closest Proximity**. The closest proximity is defined as the point at which the combined lateral and vertical separation results in the lowest slant range, regardless of geometry, as determined by the separation conformance calculator. Closest proximity is entered into Block 7 of the Preliminary OE/OD Report (Form 7210-2) and Block 8 of the Final OE/OD Report (Form 7210-3), and the appropriate block of the Proximity Event Report (new), Form 7210-6.
- **b. Final Report**. Refers to FAA Form 7210-3, "Final Operational Error/Deviation Report."
- **c.** No Conformance. Refers to losses of the separation minima that do not qualify for a separation conformance rating; e.g., minimum vectoring altitude (MVA), oceanic, surface, non-radar, and military formation flights.
- **d. Operational Deviation (OD)**. An occurrence attributable to an element of the air traffic system which did not result in an Operational Error (OE) as defined in this Notice, but:
- (1) Less than the applicable separation minima existed between an aircraft and adjacent airspace without prior approval; or
- (2) An aircraft penetrated airspace that was delegated to another position of operation or another facility without prior coordination and approval; or
- (3) An aircraft penetrated airspace that was delegated to another position of operation or another facility at an altitude or route contrary to the altitude or route requested and approved in direct coordination or as specified in a letter of agreement (LOA), precoordination, or internal procedure; or
- (4) An aircraft is either positioned and/or routed contrary to that which was coordinated individually or; as specified in a LOA/directive between positions of operation in either the same or a different facility; or

NOTE-

This does not apply to inter/intra-facility traffic management initiatives.

- (5) An aircraft, vehicle, equipment, or personnel encroached upon a landing area that was delegated to another position of operation without prior coordination and approval.
- **e. Operational Error (OE)**. An occurrence attributable to an element of the air traffic system in which:
- (1) Less than 90% of the applicable separation minima results between two or more airborne aircraft, or less than the applicable separation minima results between an aircraft and terrain or obstacles (e.g., operations below minimum vectoring altitude (MVA); aircraft/equipment / personnel on runways), as required by FAA Order 7110.65 or other national directive; or
- (2) An aircraft lands or departs on a runway closed to aircraft operations after receiving air traffic authorization, or
- (3) An aircraft lands or departs on a runway closed to aircraft operations, at an uncontrolled airport and it was determined that a NOTAM regarding the runway closure was not issued to the pilot as required.
- **f. Performance**. Human conduct including actions (or inactions) leading to, during, and after an OE/PE/OD.
- **g. Preliminary Report**. Refers to FAA Form 7210-2, "Preliminary Operational Error/Deviation Report."
- **h. Proximity Event.** A loss of separation minima between two aircraft where 90 percent or greater separation is maintained in either the horizontal or vertical plane. This does not include any violation of wake turbulence separation minima or losses of separation that are classified under the No Conformance minima.
- **i. Proximity Event Report**. Refers to FAA Form 7210-6, "Proximity Event Report."
- **j.** Regional Operations Center (ROC). One of nine communications center serving the FAA's local Regional offices and the ATO's Service Area and Service Center offices.
- **k. Remaining hazards**. Primary and/or contributing causes of operational errors identified

Par 5-1-1 5-1

as still present following an operational error investigations or analysis.

- **l. Separation loss**. The amount of separation (feet or nautical miles) less than the prescribed separation minima.
- **m. Separation retained**. The amount of separation remaining (feet or nautical miles) when the separation loss is subtracted from the prescribed separation minima.
- n. Separation Conformance. A numerical indicator of the percentage of the separation maintained as a function of the separation required at the point of closest proximity. An electronic calculator is available (see ATOA website) to calculate the separation conformance number and the associated conformance category. If unable to access the calculator, multiple tables are available (see Appendix 11) to determine the conformance category. Separation distances (lateral and vertical) used to classify any separation loss are entered into Block 22 of the Preliminary OE/OD Report (Form 7210-2) and Block 65 of the Final OE/OD Report (Form 7210-3) using the format: "SC _____ (lateral distance in NM)/ (vertical distance in ft), (conformance category)." Separation calculated conformance is not for "No Conformance" events.
- **o.** Separation Conformance Index. Aggregate number that results from adding multiple composite slant range numbers together and dividing by the total number of (incidents) numbers used in the aggregate.
- **p. Service Area**. Replaces regional Air Traffic Division (ATD) throughout the previous version of Order 7210.56C.
- **q. Conformance Category.** Refers to the scale used to classify OEs and Proximity Events; A, B, and C categories refer to a group of OEs with similar proximity outcomes, with Category A being those resulting in the closest proximities. Proximity Event refers to the most minor of airborne losses of separation.
- **r. Significant event**. A suspected or actual separation loss:
- (1) involving Presidential Aircraft, a member of the Congress, or the media; or
- (2) resulting in a Conformance Category A OE (see Chapter 6); or

- (3) that will <u>likely</u> generate significant media interest.
- **s. Slant Range**. The straight line distance between two aircraft.
- **t.** Washington Operations Center (WOC). Communications center serving the FAA's Headquarters and key ATO offices.

5-1-2. SUSPECTED EVENT

All separation losses must be individually investigated and analyzed to determine the performance of the air traffic control system, and to determine the correct actions to take to ensure that the providing of air traffic services is both predictable and maintains the target level of safety.

NOTE-

- 1. Maintaining an efficient and safe air traffic control system requires that all deficiencies (including losses of separation) in our system be identified for analysis and reporting. Separation losses, even small losses such as Proximity Events, must be immediately reported to any available management official or controller-in-charge (CIC), even if not electronically detected. Proximity Events must be reported regardless of the probable cause.
- 2. To support the agency's initial determination as to whether an investigation is warranted, employees must be verbally notified they have been associated with a possible OE/OD and must provide the preliminary information of which they have knowledge, when requested by the management official or CIC. This phase is meant only to determine the need for an investigation and is not investigatory.

5-1-3. INITIAL INVESTIGATIONS

a. The initial investigation should be fact finding in nature. It determines what occurred in the system, ensures corrective action is initiated to maintain system integrity, and provides for appropriate reporting and future analysis. Managers should rarely remove employees from any operational position pending the outcome of an OE/OD/PE investigation. For serious safety events or significant performance concerns, it <u>may</u> be necessary to remove an employee from operational duties either at the determination of management or at the request of the employee.

NOTE-

1. There are occasions when higher levels of management may require further review of a suspected

5-2 Par 5-1-1

incident, and this further review may result in the discovery of an incident not previously identified.

- 2. It is understood and expected that some level of investigation will be required to determine whether an event is an operational error, proximity event or nonevent. Some facilities presently have tools in place to aid in this investigation (FALCON, TARP, PRM-LSI, NOP). Additional tools are being developed and will be delivered in the future.
- **b.** The management official, or the CIC when a management official is not available, must determine the validity of suspected OE/PE/OD, and if valid, must ensure the following items are accomplished.

NOTE-

Other facility personnel must help the management official and/or CIC gather data to conduct the initial investigation, when possible.

- (1) When information indicates that an OE/PE/OD may have occurred in another facility, advise that facility's management official or CIC immediately, and conduct a QAR in accordance with section 4-1-3 of Order 7210.56C.
- (2) When preliminary review indicates that 90% or more of the required vertical or lateral separation was maintained, and wake turbulence separation did not apply to an airborne separation loss, consider the incident to be a Proximity Event.

NOTE-

Minimize the operational disruptions for any investigation of Proximity Events.

(3) When the preliminary review indicates that less than 90% of the required vertical or lateral separation was maintained, or wake turbulence separation did apply to an airborne separation loss, consider the incident to be an Operational Error.

5-1-4. MULTIPLE LOSSES OF SEPARATION OR MULTIPLE DEVIATIONS DURING A SINGLE EVENT

During a single incident in which multiple OEs/PEs/ODs are reported and/or discovered, each OE/PE/OD must be reported individually by completing a separate FAA Form 7210-2 or 7210-6. Each form should describe the individual OE/PE/OD, including a reference, if necessary for clarity, to the other related incidents.

NOTE-

- 1. When both an operational deviation and a proximity event result from the same incident, a separate report for both events is required. However, when the same incident results in an operational deviation and an operational error, only the operational error report is required. Subparagraph b, below, may still be applicable to multiple OE/PE/OD that result in chain reaction from a single event.
- **2.** Multiple PEs may be reported on a summary report (see paragraph 5-1-5, subparagraphs).

5-1-5. INVESTIGATIVE PROCESS

If at any time the investigation of a separation loss reveals that an operational error/deviation actually occurred, process that incident in accordance with this paragraph. Ensure that investigations are conducted in accordance with any negotiated agreements between the FAA and pertinent labor organizations.

- **a.** Fact Finding. The investigation of an OE/OD must entail an in-depth inquiry into all causal factors. The following should be considered for a comprehensive investigation:
 - (1) Facility procedures.
 - (2) Facility training.
 - (3) Facility supervision.
 - (4) Equipment.
 - (5) Control environment.
 - (6) External factors.
 - (7) Controller action vs. inaction.
 - (8) Airspace configuration.
 - (9) Traffic flow/volume/initiatives.
- (10) Pilot actions, including the consequence of any Traffic Alert and Collision Avoidance System (TCAS) event.
- (11) Route of flight or taxi route, as appropriate.
 - (12) Weather.
 - (13) Position configuration.
 - (14) Coordination procedures.
 - (15) Airport environment:
 - (a) Runway markings.
 - (b) Ramp use.

Par 5-1-3 5-3

- (c) Areas of poor visibility (blind spots, fog).
 - (d) Runway configuration.
 - (e) Airport Congestion.
 - (f) Surface Conditions (rain, ice, snow)
 - (16) Human factors.
- (17) Compare the system time of any pertinent equipment.
- (18) Staffing levels and/or position assignments based on proficiency vs. complexity/volume.
- (19) Radar Data (see Appendix 1, Radar Data Processing).
- **b.** Interviews. To ensure effective safety investigations and analysis it is imperative that all valuable information and insights are gathered from any and all sources. All employees must be aware that the sharing of valuable safety information is a fundamental tenet of a safety culture and a primary function of their job regardless of position. Failure to provide safety information erodes the very foundation of a true safety culture and must be discouraged through available and appropriate means.

When conducting interviews, it is crucial that they be conducted in an atmosphere of shared concern that is designed to determine the underlying causes that may be indicative of risk in the NAS. It should be noted that, while certain operational personnel may have taken action(s) or failed to take action(s) that were directly related to the OE/D being reported, management personnel conducting interviews should emphasize the information-gathering purpose of any interview so that as much usable information as possible can be collected.

Personnel interviews should be conducted to the extent necessary to determine if an operational error/deviation has actually occurred. In addition, it will at times be necessary to gather additional information from operational personnel that were providing air traffic services during, or were witnesses to, an incident to properly complete FAA Forms 7210-2 and 7210-3. Since many personnel in a facility, e.g., controllers, air traffic assistants, and supervisors may be knowledgeable of, or actually were providing air traffic services during an incident, it is recommended that operational personnel be interviewed as appropriate.

c. If the review of radar data cannot occur immediately following a suspected OE/OD, record the incident and report the incident using estimated closest proximity, (FAA Form 7210-2, block 7) until such time a review of radar data can occur.

NOTE-

This review should occur in a timely manner, i.e., next business day.

d. Review available radar data (see Appendix 1, Radar Data Processing, FAA Order 7210.56C), flight strips, and appropriate computer data. Many new systems retain data on their individual hard drives. These data are generally deleted from the hard drives after 15 calendar days or 45 calendar days. The Manager or designee is responsible for advising (Technical Operations) the System Operations Center (SOC), or Operational Control Center (OCC), as appropriate, in a timely manner so that they can extract these data onto a storable/retainable electronic medium.

NOTE-

- 1. For Controller-Pilot Data Link Communications (CPDLC) systems, data reduction and analysis tool printouts will indicate a chronological sequence of textual CPDLC transactions. Individual CPDLC messages are stored in the DataLink Applications Processor temporary file as a binary encoded message and can be printed out in a text format for review.
- **2.** Requests for User Request Evaluation Tool (URET) and Display System Replacement (DSR) data should be made through the DSR/URET Helpdesk at 800-377-0308.
- e. Review voice recordings as soon as feasible.
- (1) Two certified re-recordings, one marked "original" and the other marked "Copy" must be made from the original voice recording and must include the audible time channel. Facilities must retain both recordings in the OE/OD file. These recordings must be certified and labeled in accordance with FAA Order 8020.16. Cassette tapes, digital file (e.g. WAV), and computer media. suitable diskette are Include communications for a period of five minutes before initial contact to five minutes after the last contact with each position involved in the OE.
- (2) If the above period exceeds 30 minutes, the Director of Operations at the Service Area may approve, with Safety Services Investigations &

5-4 Par 5-1-5

Evaluations concurrence, limiting the recording to that period pertinent to the specific OE/OD.

- **f.** When the preliminary investigation indicates that another facility is involved in the occurrence, confer with the other Manager(s) as soon as feasible to determine the scope of the other facility's investigative effort and how long it will take.
- g. The Manager of any other involved facility must provide the reporting facility with information and assistance as required. This may require an investigation on the same scale as that performed by the reporting facility, in which case the Manager must have the same responsibilities, as defined in 5-1-3, Initial Investigations. The Manager of any other involved facility must also retain all pertinent original data.
- **h.** Notify the Air Traffic Manager of the OE/OD.
- **i.** If the incident involves multiple facilities and they cannot agree on which facility has the primary responsibility, all involved facilities must complete FAA Form 7210-2 within the required notification period, and request relief from an official above them in the organization (e.g. hub, Service Area, Service Unit, and/or Safety Services).
- **j.** Ensure that FAA Form 7210-2, Preliminary Operational Error/Deviation Investigation, is completed for OEs and ODs.

NOTE-

Appendix 2 of Order 7210.56C contains instructions for completing FAA Form 7210-2. FAA Form 7210-2 must include pertinent actions of the pilot(s) and air traffic services leading up to the event and any subsequent action. When writing the summary, be as clear and concise as possible using who, what, when, where, and how to describe the entire incident.

- **k.** Notify the Office of Safety Quality Assurance staff (QA Staff) and the Service Area of all reported or suspected OE/ODs as follows:
 - (1) Significant events and surface errors:
- (a) Fax the completed FAA Form 7210-2, and a reduced copy of the ESAT data, NTAP plot, and LST 5 text data (En Route only) to the ROC for transmittal to the QA Staff. Fax transmittal must be completed prior to any telephonic briefing.
- (b) A facility management official or CIC must brief the QA Staff telephonically through the ROC/WOC within 4 hours after the OE is first reported or suspected.

(2) All other OEs and all ODs:

- (a) Fax the completed FAA Form 7210-2, and a reduced copy of the ESAT data, NTAP plot, and LST 5 text data (En Route for OEs only) to the ROC for transmittal to the QA Staff by 1600 local time (of reporting facility) of the next administrative day after the OE/OD is first reported or suspected.
- **(b)** OEs that are not significant events/surface errors, and all ODs, do not require telephonic notification but do require a POC and phone number in block 22, Summary.

NOTE-

The time limit should not prevent the preliminary investigation from continuing. Instead, it ensures that the QA staff is aware of reported or suspected events within a reasonable time. If unable to meet the reporting time requirement, the management official or CIC must request an extension from the QA staff prior to the requested reporting time-limit.

- **l.** Suspected equipment or automation anomalies that may be causal or contributory must be immediately reported to (Technical Operations) the System Operations Center (SOC), or Operational Control Center (OCC), as appropriate, and investigated thoroughly. If an equipment or automation anomaly from another facility is suspected, advise a management official at the other facility immediately. Document the notification on FAA Form 7230-4.
- m. Continuous Data Recording (CDR) and National Track Analysis Program (NTAP) are the most common event records used to determine proximity. Safety Services expects CDR or NTAP records as soon as feasible after every OE. In addition, En Route facilities will prepare SATORI, with voice, and capable Terminal facilities will prepare a movie file (containing RAPTOR video of radar digital recording and of communications), as soon as feasible after every OE. Terminal facilities not capable of producing a movie file shall provide CDR data and a cassette tape (digital WAV file is acceptable) re-recording of voice communications with the time channel, as soon as feasible after every OE/OD.

NOTE-

Surveillance sensor(s) being actively used at the control position(s) at the time of the loss of separation must be utilized to conduct the investigation and to determine the closest proximity and loss of separation.

Par 5-1-5 5-5

- n. When the initial investigation results in a determination of a non-occurrence, retain all data used in the investigation process (e.g., pilot/specialist statements, records of conversations, ESAT, and CDR/NTAP data in an approved electronic format), as well as any other pertinent data not otherwise required to be retained, for 45 calendar days after the date of the determination. Facilities that determine the event was a non-occurrence based on a printed ESAT, CDR/NTAP data and plots must retain both the original paper printout and an electronic copy.
- **o.** Electronic files may be made available to Safety Services using the file transfer protocol (FTP://172.22.8.31) secured intranet site.
 - **p.** For losses of separation determined to be Proximity Events, review available voice and radar data in order to accurately provide information required to complete Form 7210-6.
- q. Forward the required information for each Proximity Event directly to Safety Services, either
 by fax to (202) 385-4718 or electronically: 9-ATOS-HQ-INVESTIGATIONS/AWA/FAA by close of business of the next administrative day following the event. Information may be provided either by completion of individual Forms 7210-6 for each separate Proximity Event, or information for multiple events may be provided in a single summary report containing all required information.

5-1-6. ATM RESPONSIBILITIES

- **a.** The ATM of the facility whose personnel were responsible for the separation of the aircraft involved, regardless of where the OE/OD occurred, shall:
- (1) Ensure that OE/OD investigations are conducted in accordance with any negotiated agreements between the FAA and pertinent labor organizations.
- (2) When the **Preliminary** OE/OD Investigation Report indicates that another facility(s) is involved in the occurrence, as soon as feasible confer with other ATM(s) to determine the scope of the other facility's investigative effort and how long it will take. This includes gathering data and completing Parts I and II of FAA Form 7210-3, Final Operational Error/Deviation Report. If the reporting ATM and the other ATM cannot concur in any phase of their respective investigations, their

differences shall be reported to the ATD for a resolution.

- (3) Designate the Investigator-In-Charge (IIC). The IIC may be designated on a rotational or permanent basis. Supervisory personnel or facility staff shall perform the IIC function. If the only facility officer is the ATM, and there are no assigned supervisors, the ATM performs the IIC functions.
- (4) Designate a team to assist the IIC in the investigation of each OE/OD. The ATM shall determine the size and composition of the team, but shall as a minimum afford a Union designated representative reasonable opportunity to participate as a member of the investigative team.
- **(5)** Ensure FAA Form 7210-3 is completed. Instructions for completing FAA Form 7210-3 are contained in Appendix 4.
- **b.** The ATM of any other involved facility shall be responsible for providing the reporting facility with information and assistance as required. This may require an investigation on the same scale as the reporting facility, in which case the ATM shall have the same responsibilities as defined under paragraph 5-1-3, Initial Investigations. The ATM of any other involved facility shall also be responsible for retaining all pertinent original data until notified of release by AAT-20.
- **c.** The IIC is responsible for conducting a complete investigation and shall be the final authority for the findings and recommendations to be submitted to the ATM. In addition the IIC shall:
- (1) Ensure that all pertinent data has been collected and documented in Part I of FAA Form 7210-3 and distributed to the ATM.
- (2) When other facilities are involved, ascertain the scope of their investigation and coordinate the exchange of data and assistance as required.
 - (3) Assign duties to team members.
- (4) Ensure that interviews conducted are done in accordance with paragraph 5-1-5b, Interviews.
- **d.** The IIC Investigative Team shall:
- (1) Assist the IIC by performing and completing all assigned tasks.

5-6 Par 5-1-5

(2) Remain under the supervision and jurisdiction of the IIC until relieved by the IIC or ATM.

5-1-7. RECLASSIFICATION

- **a.** After preliminary notification procedures are completed, a review of the data may indicate a reclassification of the incident to one of the following:
 - (1) A pilot deviation.
 - (2) Military facility deviation.
 - (3) An OD (from an OE or PE).
 - (4) An OE (from an OD or PE).
 - (5) A PE (from an OD or OE).
 - (6) A non-occurrence.
- **b.** If a reclassification is determined to be appropriate, the Manager must:
- (1) Complete FAA Form 7210-5, Operational Error/Deviation Reclassification Report.

NOTE-

If an incident is reclassified from an OE to an OD or PE, an OD to an OE or PE, or from a PE to an OE or OD, reclassify the original incident to a "Non-occurrence," and indicate the new report number in the supporting documentation.

- (2) Forward FAA Form 7210-5, along with the rationale and all necessary supporting documentation, including voice tapes and radar data, to the Service Area for review no later than 45 calendar days from the date of the initial report.
- **c.** The Service Area must thoroughly review all requests for reclassification for completeness of data and validity. They must forward the requests they believe have merit to the Service Unit no later than 60 calendar days from the date of the initial report.
- **d.** The Service Unit must thoroughly review all forwarded requests for reclassification. They must forward the requests they believe have merit to Safety Services Investigations & Evaluations no later than 75 calendar days from the date of the initial report.
- **e.** Safety Services Investigations & Evaluations must review the forwarded requests for reclassification and determine whether the requests

should be granted. Safety Services Investigations & Evaluations must advise the Service Unit via memorandum of the disposition of the FAA Form 7210-5 no later than 90 calendar days from the date of the initial report.

NOTE-

Facilities are responsible for completing/changing the appropriate forms after reclassification approval is received.

f. All original forms and supporting investigative data must retained in the facility for $2\frac{1}{2}$ years.

5-1-8. PERFORMANCE BASED ACTIONS

Historically, performance management for operational personnel has been driven by reportable events (OE/Ds, PDs, etc.) and has been conducted This method has proven to be post-event. ineffective and is contrary to a just and safe culture. While facility management must address any performance issues identified during the course of an investigation in the most appropriate manner, this should not be the primary method of observing and documenting performance. Managers are expected to conduct performance management on an ongoing basis following the model set forth in the FAA Performance Management System (PM-9.1). In addition, Terminal Services and En Route Services are developing Quality Control directives that will provide specific requirements for monitoring performance and providing feedback that will set a framework for conducting effective performance management. Managers are reminded that any training assigned to employees must be accomplished in accordance with FAAO 3120.4 and the FAA/NATCA CBA (for bargaining unit employees).

- **a.** Facilities operating under ATSAP must follow the guidance contained in N JO 7210.705 regarding performance based actions for events that have been reported to and accepted by the ERC.
- **b.** Disciplinary action may not be taken for performance which led to an OE, OD, or PE if all of the following conditions are met:
- (1) The employee's action or lack of action was inadvertent.
- (2) The employee's action or lack of action did not involve a criminal offense, accident, or action under Section 609 of the Federal Aviation

Par 5-1-6 5-7

Act which discloses a lack of qualification or competency, which is wholly excluded from this policy.

(3) The employee shows proof that within 10 days after the occurrence of the OE, OD, or PE, he/she completed and submitted, electronically or by mail, a report of the occurrence to the National Aeronautics and Space Administration's (NASA) ASRS. The submission and acceptance of a report under the ATSAP program, this order, Chapter 9, will automatically submit a report to the ASRS.

■ 5-1-9. FINAL REPORTS

The ATM shall:

- **a.** Analyze the data submitted by the IIC in Part I of the FAA Form 7210-3 to determine:
- (1) The classification of the occurrence; i.e., operational error, operational deviation, pilot deviation, or no occurrence. If it is determined that an OE/OD can be reclassified, the ATM shall request that the incident be reclassified in accordance with paragraph 5-1-7, Reclassification.
- (2) The categorization of the OE/OD; i.e., ATCS, manager/supervisor/other personnel, procedural, equipment, or any combination thereof.
 - (3) The causal factors of the OE/OD.
- **(4)** The recommendations and corrective actions to be taken to prevent a recurrence of the OE/OD.
- **b.** Provide copies of Part I and Part II to the Principal Union Representative, before completing Part II. Item 69. **Facility** Manager's Recommendations and Corrective actions. The union representative may submit comments or recommendations in writing to the ATM within 5 calendar days of receipt. Recommendations should concern corrective actions that can be undertaken to preclude a similar occurrence. The ATM shall consider these comments in his/her deliberations before completing **Facility** Manager's Recommendations and Corrective Actions and shall append the union representative's comments to Part II.
- c. Complete Part II of the FAA Form 7210-3 and submit two copies of Parts I and II and all attachments (including union statements) to the Director of Operations, and one copy each to other ATMs and Directors of Operations as required,

within 30 administrative workdays of the date the occurrence was reported.

- **d.** Investigations conducted by Safety Services under 5-1-17, ATO Safety Services Investigations, of this Notice do not relieve facility management of the requirement to complete the Final Operational Error/Deviation Report (FAA Form 7210-3).
- **e.** For Proximity Events, the information contained on FAA Form 7210-6 or optional summary report constitutes the final report. If the investigation has revealed information that differs from that which was initially reported, an amended FAA Form 7210-6 must be prepared.
- **f.** When an employee of another facility is involved in an OE, ensure that the employee's front line manager, is given sufficient documentation to determine the appropriate corrective action.
 - g. Retain the original report in the facility files.
- **h.** Establish a follow-up method to evaluate the effectiveness of the local recommendations and actions that result from the investigation.
- i. Send copies of the completed FAA Form 7210-2 or 7210-6 to (Technical Operations) the System Operations Center (SOC), or Operational Control Center (OCC), for any operational error (OE) or Proximity Event (PE) where equipment or automation is found to be contributory.
- **j.** Service Areas must work closely with other Service Areas when an OE involves facilities in different Service Areas and the respective Managers cannot concur in any phase of their investigations. If 5 business days have passed since the incident and a decision cannot be reached with the other Service Areas, forward all investigative data to the Service Unit for review and resolution. If 5 business days have passed since the incident was elevated and the Service Units can not reach a decision forward all data to Safety Services for resolution. Retain all recordings, data, and documentation pertaining to the incident until Safety Services reaches a decision.

5-1-10. ENTRIES IN TRAINING & PROFICIENCY RECORD (FAA Form 3120-1)

No OE/OD/PE documentation shall be entered into an employee's training records. Managers shall only enter any assigned training in accordance with FAAO 3120.4 without any reference to the incident.

5-8 Par 5-1-8

■ 5-1-11. DOCUMENTATION RETENTION

The reporting facility must:

- **a.** Retain the OE/PE/OD investigation file for 2 ½ years from the date of the occurrence.
- **b.** Ensure that the OE investigation file (for A, B, and C categories) is identified by a label (maximum size three × five inches) clearly marked with "OPERATIONAL ERROR," the report number, the incident local date and time, and the local date to be destroyed.
- **c.** Ensure that the Proximity Event investigation file is identified by a label (maximum size three x five inches) clearly marked "PROXIMITY EVENT(s)," the date of the event(s) and the local date to be destroyed. All proximity events occurring on the same calendar day may be retained as a single file.
- **d.** Ensure that the OD investigation file is identified by a label (maximum size three × five inches) clearly marked with "OPERATIONAL DEVIATION," the report number, the incident local date and time, and the local date to be destroyed.
- e. Ensure that the OE/OD investigation file contains, at a minimum, the original FAA Forms 7210-2; the original FAA Form 7210-3 (if appropriate); signed employee personnel statements and/or any similar supporting documents; ATO Safety Services preliminary/final investigative reports (when ATO Safety Services designates an investigative team), the two certified re-recordings marked "Original" and "Copy" in accordance with 5-1-5, Investigative Process, for audio; and all supporting documentation such as the original ESAT, NTAP, Data Analysis and Reduction Tool (DART), or CDR plot (in both printed format and an approved electronic medium).

NOTE

A facility may elect to store the supporting data on a computer disk or other portable electronic medium.

f. Ensure that the PE investigation file contains, at a minimum, the original FAA Forms 7210-6 or optional summary reports. Radar, voice, and other investigative data need only be retained for Proximity Events determined to be significant events.

NOTE-

The determination of a significant event may be made by the Air Traffic Manager, the Service Area, or Service Units.

5-1-12. FACILITY, HEADQUARTERS & SERVICE UNIT RESPONSIBILITIES

- **a.** Facility. The following activities are the prime responsibility of the facility reporting the OE/OD/PE. Facilities may receive support from their Service Area and/or Service Unit offices.
- (1) If the incident involves multiple facilities and the reporting Manager and the other Manager(s) cannot concur in any phase of their respective investigations, the Managers must report their differences to the Service Area for a resolution within 5 business days. If 5 business days have passed since the issue was elevated to the Service Area(s) and a decision cannot be reached with the other Service Area(s), forward all investigative data to the Service Unit(s) for review and resolution. If 5 business days have passed since the incident was elevated to the Service Unit(s) and the Service Unit(s) can not reach a decision forward all data to Safety Services for resolution.
- (2) Equipment or automation anomalies that are listed as contributory require Technical Operations analysis. For each such anomaly, they must provide a description of the normal functionality and a description of the degraded condition/state associated with the anomaly.
- (3) Retain a copy of the preliminary investigative report prepared in the facility OE/PE/OD file.
- **(4)** Attach a copy of the final investigative report to the Final Operational Error/Deviation Report.
- (5) Once approved by the Service Unit, facilities will enter identified risks, casual factors and corrective action plans into FSAS.
- **b.** Service Areas and Service Centers. Service Areas and Service Centers must provide support to each Service Unit. Additional roles and responsibilities are to be determined.
- **c.** Service Units. The following activities are the prime responsibility of the Service Unit whose facility reports any OE/OD/PE. Service Units may receive support from any Service Center and/or other Service Unit offices.

Par 5-1-11 5-9

- (1) Service Units will report to Safety Services appropriate management actions taken to reduce the probability of serious air traffic incident reoccurrence. The Service Unit will provide documentation of management action(s), contributing factors, and root causes of any serious air traffic incident within 72 hours (or third business day) following any category "A" OE, and within ten calendar days following any category "B" OE.
- (2) Service Units will provide an analysis to Safety Services of the preliminary incident findings and recommendations received from any ATO investigative team within 10 calendar days.
- (3) Service Units will analyze all losses of separation minima for causal and coincident factors. Analysis may relate each incident to past incidents at that facility/Service Area/Service Unit, (if and develop recommendations, applicable), including target completion dates, to mitigate the reoccurrence of future incidents. Service Units will report to Safety Services management actions taken, identify primary and contributing factors, and develop corrective action plans for each "A" and "B" OE to reduce the probability of reoccurrence. Service Units will report to Safety Services management actions taken, identify primary and contributing factors, and develop corrective action plans for "C" OEs and "Proximity Events" (PE) groupings to reduce the probability of reoccurrence. Service Unit reports on individual "A" and "B" OEs are reported separately, "C" OE groupings are reported monthly, and PE groupings are reported quarterly.
- (4) Service Units will establish follow-up mechanisms to determine if corrective actions contained in FAA Forms 7210-3 are effective and are accomplished in a timely manner. All corrective actions must specify a completion deadline.
- (5) Approve mitigation strategies identified for category "A" operational errors.
- (6) Service Units will ensure their facilities have access to current technology used for automated alerts and the evaluation of operational error classifications, and that such automated tools are kept fully functional.
- (7) Service Units will to the extent possible provide access to OE/PE/OD records for all facilities, Service Units, and other field offices to permit tracking of findings, mitigations, status, and analysis.

(8) Service Units will monitor identified risks, casual factors and mitigation action plans by the responsible facilities.

5-1-13. ATO SAFETY SERVICES INVESTIGATIONS

At the discretion of the Vice President of Safety Services, any air traffic event may be investigated. The following activities are the prime responsibility Safety Services following any reported OE/PE/OD. Safety Services may receive support from any Service Area and/or Service Unit offices. Safety Services will promptly decide if the ATO is forming an investigative team following any air traffic incident. Safety Services will communicate their decision regarding an investigative team to the Service Unit and AOV within 24 hours (or next business day) following any category "A" OE, and within 48 hours (or second business day) following any category "B" OE. The following actions are expected when investigations are sponsored by Safety Services, regardless of the permanent affiliation of the individual(s) participating:

- **a.** Identify any safety hazards at the affected facility immediately following commencement of the investigation. The investigator, or team, will recommend mitigations to address these hazards within 12 hours of arriving at the facility reporting the incident, following any category "A" OE, and within 24 hours following any category "B" OE.
- **b.** Submit their initial assessment of contributing factors to Safety Services within 36 hours (or second business day) following any category "A" OE, and within 72 hours (or third business day) following any category "B" OE.
- **c.** Submit their preliminary investigative report to ATO Safety Services and responsible Service Unit within seven calendar days following any category "A" OE, and within ten calendar days following any category "B" OE.
- **d.** Submit their final investigative report to ATO Safety Services and responsible Service Unit within 30 calendar days following any category "A" or "B" OE. Safety Services must provide the final investigative report to the Service Unit.
- e. Safety Services will brief AOV on the initial assessment received from any investigator, or investigative team as soon as practical following receipt of the assessment, but no later 48 hours (or

5-10 Par 5-1-12

second business day) following any category "A" OE, and 96 hours (or fourth business day) following any category "B" OE. Primary focus of this briefing is to outline actions the ATO is taking to prevent the reoccurrence of similar incidents and to address any remaining hazards.

f. The Vice President of Safety Services may issue a memorandum of non-compliance whenever a serious and persistent safety risk remains following an investigation, analysis, and/or report.

5-1-14. ANALYSIS & FOLLOW-UP ACTIONS

- a. Safety Services will compare the revised FY07 conformance classification records for operational errors to the former severity classification records (prior to FY07) for operational errors on a monthly basis for the first twelve months following implementation of this revised policy. The comparison reports will be distributed to the operating Service Units and AOV. The baseline safety performance to be used and the method to measure the ATO's annual safety improvement will be three years (FY04-FY06) of OE data. The baseline safety performance data will be analyzed using the proposed four severity categories based on the separation conformance.
- **b.** Safety Services will publish a new separation conformance index designed to assess the overall conformance to standards when multiple errors are aggregated for comparison. This new separation conformance index will be used to measure improvements in the mean-separation of all "A" and "B" errors.
- **c.** Safety Services will provide monthly briefings to AOV following implementation of this policy change to include actual improvements and make adjustments to the policy as necessary.
- **d.** Safety Services will track, monitor and follow-up on all findings, recommendations, and mitigations related to operational errors (OE), Proximity Events (PE) and the subsequent investigations and analysis. Safety Services will audit facility records, Safety Assurance records at the Service Centers, and Service Unit records at Headquarters to ensure that controller performance continues to be evaluated and analyzed at regular intervals (no less than quarterly). Safety Services will ensure that mitigation actions are being reviewed for effectiveness after implementation of separation conformance.

Par 5-1-13 5-11

APPENDIX 2. INSTRUCTIONS FOR FAA FORM 7210-2, PRELIMINARY OPERATIONAL ERROR/DEVIATION INVESTIGATION REPORT

Notify AAT-200, WOC & ATD through the ROC within 3 hours.

Instructions For FAA Form 7210-2, Preliminary Operational Error/Deviation Investigation Report

REPORT NUMBER:

FAC ID: Enter the facility three-character identifier.

TYPE: Enter the type of facility ("T" - Terminal, "**R**" - TRACON, "**C**" - En-Route, and "**F**" - Flight Service)

NOTE-

Use "R" for stand alone radar facilities assigned a separate facility three-character identifier

CY: Enter the last two digits of the calendar year in which the incident occurred.

E/D: Enter "**E**" for an error or "**D**" for a deviation.

SEQ.#: Enter the sequential number of the incident for the calendar year.

NOTE-

Each calendar year operational errors will start with 001 and operational deviations will start with 001 (however, they are counted separately). e.g., ZDC-C-01-E-005.

- **Block 1 Date and Time of Occurrence**: Date is based on local time only, enter time in Local and time in UTC.
- **Block 2 Date and Time Initial Investigation Started**: Date is based on local time; enter time in Local and time in UTC.
- **Block 3 Facility**: Check "FACILITY" if your facility personnel initially reported this incident or check "OTHER" if equipment (i.e. OEDP, CA), another facility, pilot or organization reported this incident.
- **Block 4 Involved Facilities**: List all other facilities that may have contributed to this incident.
- **Block 5 Altitude**: Enter "SFC" if this is a surface incident; otherwise enter altitude at which loss of separation occurred.

Block 6 Location: Use a VOR Fix/Radial/Distance that is compatible with the appropriate altitude stratum. For surface events, use runway numbers, taxiway names, or other locations found on airport diagrams. For Oceanic events use Latitude & Longitude.

Block 7 Closest Proximity: Do not leave blank. Indicate Feet, Miles or Minutes. This IS the closest proximity, not just the first hit under the required loss of separation or OEDP. If estimated, indicate method in Summary, Block 21. Where no other aircraft were involved, as in closed-runways or MVA incidents, indicate and explain in Summary, Block 21.

Block 8 Alerts: Check "ACTIVATED" if an alert was generated during the incident.

Check "NOT ACTIVATED" if this feature is installed and functioning, but did not generate an alert during the incident.

Check "NOT AVAILABLE" if this feature is installed, but was not available during the

incident.

Check "SUPPRESSED" only if this feature was suppressed.

Check "NOT INSTALLED" only if the facility does not have this feature.

Block 9 TMU: Complete each item that applies to your facility, otherwise leave blank.

Item a. Enter Monitor Alert Parameter (MAP) or other automated alert function, for the

sector/position(s) involved.

Item b. Check "ACTIVATED" if an alert was generated during/or before the incident.

Check "NON-ACTIVATED" if this feature is installed and functioning but did not generate an alert.

Check "NOT AVAILABLE" if this feature is installed at the facility, but was not available during the incident.

Item c. Were any initiatives in place in response to sector/position volume or complexity, check Yes or No and explain why if volume or complexity may have contributed to this incident?

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07/20/09 Appendix 2

Block 10:

Item a. Traffic Volume: Enter the number of aircraft for which the controller had separation responsibility, including point outs. For incidents involving tower cab local controllers, do not count aircraft waiting in line for departure unless the controller was, for some reason, responsible for separation.

Item b. Traffic Complexity: Circle traffic complexity with "Low" being number 1, "Moderate" as number 3 and "High" as number 5.

Block 11 Type of Control: Check "RADAR" if the incident occurred within a radar environment.

Check "NON-RADAR" if incident occurred within a non-radar environment.

Check "OCEANIC" if the incident occurred within an oceanic environment.

Check "TOWER" if incident occurred within a tower environment (also check "RADAR," if the cab controller had radar available).

Check "AFSS/FSS" if the incident occurred within a flight service environment.

Block 12 Required Separation: Check "FAA DIRECTIVE" if the required separation was from an FAA directive such as FAA Order 7110.65, or a facility directive. List specific paragraph that was violated/misapplied. Check "LETTER OF AGREEMENT" if the required separation was from a letter of agreement with another facility or organization, (e.g., An LOA requiring 8 miles separation between aircraft in specified areas). List specific paragraph that was violated/misapplied.

Block 13 Controller Information:

Item a. Leave block blank.

Item b. Leave block blank.

Item c. Leave block blank.

Item d. Leave block blank.

Item e. Leave block blank.

Item f. Leave block blank.

Block 14 Hand Off Position: Item a. Was a RA/D-side/Tracker/HO or Coordinator assigned to this radar position? If no and volume or complexity may have been a factor, explain in Summary, Block 21. **Item b.** Was a Local or Ground Associate assigned to the Tower position? If no and volume or complexity may have been a factor, explain in Summary, Block 21.

Block 15 Staffing: List Staffing levels at time of incident. **Note:** this applies to staffing in the specific function/area that this incident occurred in, e.g., combined TRACON/Towers, incident occurred in TRACON, list only the staffing for employees assigned to the TRACON at the time of the incident. Only list CICs if that individual has been assigned CIC duties for the shift.

Block 16 Position Profiles: List position/sector(s) available in the area, radar room, sector or tower cab. WHERE the incident occurred.

Block 17 Operational Supervision:

Item a. Identify if an OS or a CIC was in charge when the incident occurred.

Item b. Leave block blank.

Block 18 Weather Sequence: Provide the most applicable weather sequence (nearest in location and time to the OE/D), identifying the source and time. List all PIREPS/SIGMETS /AIRMETS valid for the area.

Block 19 Aircraft Information:

Items a–c. Enter the involved Aircraft's callsign, type aircraft, and equipment suffix. Check "NRP" if the aircraft was on a filed National Route Program flight plan (not just issued "direct"). Check "TCAS RA" if the aircraft advised it had received a Resolution Advisory. Check "NMAC" if the pilot stated he encountered or intended on filing a NMAC Report. Enter route of flight, pertinent to this incident.

Block 20 Terminals Only: Runway Incursion information; answer all questions if applicable. Block 21 Possible Factors: This is a short list of possible factors that may have been involved in the incident. The person filling out this form should use this block as a general checklist to help develop the description of events in the summary. Enter all additional factors preliminarily determine to be contributory to the incident e.g., controller judgment, visual observation, distractions. Ensure that the rationale for each possible factor identified is clearly described in Summary, Block 21.

Block 22 Summary: The description of events should be factual and concise, but must include all pertinent information. Ensure that the rationale for each possible factor identified in Block 20 is clearly

Appendix 2

described. Use terms such as "Aircraft #1" and "Controller A" rather than actual call signs and position identifiers or names. Additionally, explain employee's activities at the time of the event as outlined in Block 13 and (if applicable) why no HO/D-side/Tracker/Local/Ground associate was assigned, as outlined in Block 14.

Block 23 Data Reviewed: Indicate if the voice tape, computer data, employee statements or radar playback were reviewed prior to filing this report.

Block 24 Notification: Item a. This is the person from the facility reporting the incident to Regional and Headquarters personnel. Item b. This is the individual from the Regional Operations Center (ROC), Regional Quality Assurance Specialist Operations (AXX-505),Washington (WOC), and Headquarters Safety Investigator (AAT-200) receiving the report.

07/20/09 7210.56C CHG 2 Appendix 4

Block 10 - WAS TRAINING IN PROGRESS?

Select "Yes" or "No" to indicate if, at the time of the incident, training was being conducted at the position where the incident took place. Blocks 11 through 36 shall be completed for each employee identified as primary or contributory to the incident.

Block 11 - ENTER P FOR PRIMARY OR C FOR CONTRIBUTORY

Leave block blank.

Block12 - NUMBER OF PERSONNEL INVOLVED

Leave block blank.

Block 13 - EMPLOYEE IDENTIFIER/FACILITY

Leave block blank.

Block 14 – EMPLOYEE IDENTIFIER

Leave block blank.

Block 15 - DATE OF BIRTH

Leave block blank.

Block 16 - SOCIAL SECURITY NUMBER

Leave block blank.

Block 17 - INDICATE THE PERFORMANCE LEVEL OF THE EMPLOYEE

Leave block blank.

Block 18 - LAST DATE OF CERTIFICATION OR RECERTIFICATION ON POSITION

Leave block blank.

Block 19 - HAS TRAINING BEEN RECEIVED WITHIN THE LAST 12 MONTHS THAT IS RELEVANT TO THE INCIDENT?

Leave block blank.

Block 20 - IS A MEDICAL CERTIFICATION ISSUE RELATED TO THE INCIDENT?

Leave block blank.

Block 21 - IDENTIFY AND DESCRIBE THE TYPE OF WORK SCHEDULE BEING WORKED AT THE TIME OF INCIDENT

Leave block blank.

Block 22 - CURRENT AND PREVIOUS SHIFT

Leave block blank.

Block 23 - AREA OF SPECIALIZATION

Enter the area of specialization in which the incident occurred.

EXAMPLE-

Area B, Tower, TRACON, South Area, Tower/TRACON.

Block 24 - SECTOR OR POSITION

Enter the sector and/or position at which the incident occurred.

EXAMPLE

Sector 34, Blueridge Sector, BKW, Sector OC9, South Arrival Radar, Arrival Radar 1, and Local Control One.

Block 25 - TIME ON POSITION

Leave block blank.

Block 26 - WHAT SECTORS OR POSITIONS WERE COMBINED AT THE POSITION BEING STAFFED AT THE TIME OF THE INCIDENT?

List any other sectors or positions that were combined at the sector or position that was staffed at the time of the incident.

Block 27 - WHICH ASSOCIATED POSITIONS WERE STAFFED AT THE TIME OF THE INCIDENT?

List any associated positions that were staffed at the time of the incident. These are positions that directly work with or assist the identified control position.

Block 28 - POSITION FUNCTION

Leave block blank.

* Block 29 - DID ANY OPERATIONAL PERSONNEL REQUEST ASSISTANCE PRIOR TO THE INCIDENT?

Select "Yes" or "No" to indicate if any operational personnel providing air traffic services to the involved aircraft requested assistance prior to the incident occurring. If "Yes" is selected, provide an explanation of the request, to whom it was directed, any action or inaction that resulted based upon the request, etc., in the Block 65.

* Block 30 - WERE ANY OPERATIONAL PERSONNEL AWARE THAT AN OPERATIONAL ERROR/DEVIATION WAS DEVELOPING?

Select "Yes" or "No" to indicate if any operational personnel providing air traffic services to the involved aircraft were aware that an OE/D was developing. If "Yes" is selected, describe the details.

* Block 31 - DID THE EMPLOYEE CONTEMPLATE TAKING CORRECTIVE ACTION?

Leave block blank.

* Block 32 - DID ANY OPERATIONAL PERSONNEL ATTEMPT TO TAKE CORRECTIVE ACTION?

Enter "Yes" or "No" to indicate if any operational personnel providing air traffic services to the involved aircraft attempted to take corrective action regarding the incident. In either case, provide an explanation in Block 65. If "Yes" is selected, explain what action was taken. If "No" is selected, explain why no corrective action was attempted.

Block 33 – OPERATIONAL PERSONNEL WERE ALERTED TO THE INCIDENT BY

Enter the first source that alerted operational personnel of the incident by selecting one of the following: Conflict Alert, MSAW/EMSAW, Self-identified, Facility Personnel, Pilot, Another Facility, or Other. If "Other" is selected, describe the source in the appropriate space.

Block 34 - DATE AND TIME OPERATIONAL PERSONNEL BECAME AWARE OF THE INCIDENT

Leave block blank.

Block 35 - WAS THE DISTANCE REFERENCE (e.g., THE J-RING) BEING USED?

This block applies only to ARTCCs. Select "Yes" or "No" to indicate if, at the time of the incident, the "J-ring" (HALO) was being used on at least one aircraft involved in the incident.

* Block 36 - WERE THERE ANY DISTRACTIONS OR ENVIRONMENTAL CONDITIONS THAT MAY HAVE INFLUENCED THE INCIDENT?

Select "Yes" or "No." If "Yes" is selected, explain in Block 65. The explanation may include reference to conditions such as construction, equipment installation, presence of visitors, loud or boisterous co-workers, equipment malfunction, or extraneous conversation with co-workers or Environmental: ambient air, work area layout, temperature, noise, or lighting.

Block 37 - WAS AN OSIC OR CIC ON DUTY AT THE TIME OF THE INCIDENT?

Enter an "A" if an OSIC was in charge. Enter a "C" if a CIC was in charge. Leave the remainder of the block blank.

* Block 38 - WAS THE ASSIGNED OSIC/CIC PRESENT IN THE OPERATIONAL AREA AT THE TIME OF THE INCIDENT?

Select "Yes" or "No" to indicate if the OSIC/CIC was present in the operational area at the time of the incident. If "No" is selected, provide an explanation in Block 65.

Block 39 - DID THE EMPLOYEE REQUIRE OSIC/CIC ASSISTANCE PRIOR TO THE INCIDENT?

Leave block blank.

* Block 40 - DID THE ASSIGNED OSIC/CIC PROVIDE ASSISTANCE?

Leave block blank.

07/20/09 7210.56C CHG 2 Appendix 4

Block 41 - IF SECTORS WERE COMBINED, DID THE OSIC/CIC APPROVE THE COMBINATION?

For those facilities that have sectors, select "NOT COMBINED," "NO," or "YES" as appropriate. For those facilities that do not have sectors, select "N/A."

Block 42 - IF POSITIONS WERE COMBINED, DID THE OSIC/CIC APPROVE THE COMBINATION?

Select "NOT COMBINED," "YES," or "NO," to describe the combination of positions.

Block 43 - IN WHAT ACTIVITY WAS THE ASSIGNED OSIC/CIC ENGAGED AT THE TIME OF THE INCIDENT?

Select the activity that most describes what the OSIC/CIC assigned to supervise the operation was doing at the time of the incident. If "Other" is selected, describe the activity as briefly as possible.

"General Supervision" means the OSIC/CIC was not engaged in direct operational supervision at the time of the incident. However, he/she was in the area, perhaps dealing with paperwork, phone calls, weather displays, equipment matters, etc.

"Direct operational supervision" means the OSIC/CIC was observing control positions and providing guidance and/or direction to controllers.

Block 44 - WAS THE OSIC CERTIFIED IN THE AREA OF SPECIALIZATION WHERE THE INCIDENT TOOK PLACE?

If an OSIC was assigned, at the time of the incident, to supervise the area of operation where the incident took place, select either "Yes", "No." A selection of "Yes" means that the OSIC was certified to work at least one operational control position in the area of specialization, at the time of the incident.

If "No" is selected, provide an explanation in this block of why the assigned OSIC was not certified to work at least one operational control position in the area of specialization, at the time of the incident.

Select "N/A" if an OSIC was not assigned, at the time of the incident, to supervise the area of operation where the incident took place.

Block 45 - TRAFFIC COMPLEXITY

Select 1 through 5 on the scale to indicate the level of traffic complexity at the time of the incident. One indicates a low level of complexity, 3 indicate an average level of complexity, and 5 indicate a high level of complexity.

When determining the traffic complexity, consider the overall difficulty of the position; e.g. weather, variety of aircraft, traffic volume, coordination requirements, runway configuration, emergency situations, arrival/departure flows, etc.

* Block 46 - INDICATE WHICH FACTOR (S) WERE ASSOCIATED WITH TRAFFIC COMPLEXITY

Select the factor(s) that determined the level of traffic complexity at the time of the incident. If any of the factors were pertinent to the incident, provide an explanation in Block 65.

Block 47 - TYPE OF CONTROL PROVIDED

Select the type of control that was being provided at the position at the time of the incident. Select "RADAR," "TOWER," "OCEANIC," or "NONRADAR."

Block 48 - REQUIRED SEPARATION WAS BY

Select the appropriate document that specified the required separation concerning the incident. Select either "FAA ORDER," or "FACILITY LETTER OF AGREEMENT OR DIRECTIVE."

If "FAA ORDER" is selected, enter the order number and applicable paragraph number.

If "FACILITY LETTER OF AGREEMENT OR DIRECTIVE" is selected, enter the facility with which the LOA has been negotiated or the facility directive and paragraph numbers.

Block 49 - WERE ANY DEFICIENT PROCEDURES NOTED AS A RESULT OF THE INCIDENT?

Select "Yes" or "No" to indicate if any national, regional, or local procedures were found to be deficient as a result of the incident. If "Yes" is selected, provide an explanation in this block.

Block 50 - WERE ANY SPECIAL PROCEDURES IN EFFECT AT THE TIME OF THE INCIDENT?

Select "Yes" or "No" to indicate if any pertinent special procedures were in effect at the time of the incident. If "Yes" is selected, provide an explanation in this block.

For example, if a special military operation was pertinent to the incident, identify the operation and explain how it was pertinent. If unusual runway or airspace configurations were pertinent to the incident, describe those configurations and explain their pertinent relationship to the incident.

Block 51 - NUMBER OF AIRCRAFT INVOLVED IN THE INCIDENT

This number will automatically be entered as data for each aircraft is entered.

Blocks 52 through 58 shall be completed for each aircraft/vehicle identified as involved in the incident.

Block 52 - IDENTIFICATION

Enter the aircraft identity using combinations not to exceed 7 alphanumeric characters

Block 53 - PREFIX/TYPE/SUFFIX

Enter the aircraft prefix/type/suffix using combinations not to exceed 9 alphanumeric.

EXAMPLE-

A heavy Boeing 747 with TCAS, RNAV, and a transponder with altitude encoding capability would be entered as "B/B747/R."

Block 54 - FLIGHT PROFILE OR VEHICLE POSITION AT TIME OF INCIDENT

Select the flight profile that best describes the aircraft before the incident. This should be the profile that was in effect before any action was taken to resolve the potential incident.

For example, an aircraft was in level flight when the controller saw the potential conflict. The controller then climbed the aircraft to maintain separation, but that action was not enough and separation was lost. Select "LEVEL FLIGHT" in this block for this scenario. The same would apply to vectors given to resolve the situation.

Select "OTHER" if the most appropriate profile is not listed and describe that profile in the text field. When more than one of the profile choices applies, make one selection then select "OTHER" and describe the other profile(s) in the text field.

Block 55 - AIRCRAFT GROUND SPEED

Enter the aircraft ground speed, in knots, at the time of the incident. Select "N/A" if the aircraft was on the ground at the time of the incident.

Block 56 - TCAS EQUIPPED

Select "Yes", "No", or "Unknown" to indicate if the aircraft was equipped with an operating TCAS at the time of the incident.

Block 57 - EVASIVE ACTION

Select "Yes", "No", or "Unknown" to indicate if the aircraft took any evasive action with regard to the incident. Chose "TCAS" if a pilot responded to a resolution advisory and climbed or descended.

EXAMPLE-

An aircraft inadvertently vectored close to another aircraft at the same altitude turns out of the path of that aircraft.

Block 58 - DID THE PILOT FILE A NEAR MIDAIR COLLISION REPORT?

Select "Yes", "No", or "Unknown" to indicate if the pilot filed a near midair collision report.

Block 59 - AIRCRAFT AND OBSTRUCTION/OBSTACLES

If the incident involved aircraft and an obstruction or obstacle that contributed to the cause of the incident, select the appropriate item. If "Airport Movement Area" or "Other" is selected, explain in the text field.

* Block 60 - WAS EQUIPMENT LAYOUT OR DESIGN A FACTOR IN THE INCIDENT?

Select "Yes" or "No" to indicate if equipment layout or design influenced the incident. If "Yes" is selected, provide an explanation in Block 65.

07/20/09 7210.56C CHG 2 Appendix 4

* Block 61 - WAS ANY PERTINENT EQUIPMENT REPORTED AS FUNCTIONING UNSATISFACTORILY BEFORE THE INCIDENT?

Select "Yes" or "No" to indicate if any problems with pertinent equipment were reported prior to the incident. These are problems with equipment that existed before and during the incident. If "Yes" is selected, provide an explanation in Block 65.

Block 62 - SYSTEM(S) IN USE

Select the system(s) in use at the position where the incident occurred at the time of the incident.

Block 63 - WAS RADAR TRANSITION FROM ONE SYSTEM TO ANOTHER IN PROGRESS?

Select "Yes" or "No" to indicate if a radar transition from one system to another was in progress at the time of the incident. If "Yes" is selected, explain the circumstances of the transition in this block.

Block 64 - WHAT WAS THE STATUS OF THE CONFLICT ALERT AT THE TIME OF THE INCIDENT?

Select the status that best describes the status of the conflict alert feature at the position where the incident occurred at the time of the incident.

Block 65 - SUMMARY OF INCIDENT

Explain, in chronological order, each factor relevant to the incident.

Tell a detailed story, describing any actions pertinent to the incident. Consider actions of pilots as well as any operational personnel. The summary should clearly describe what actions (or lack of) contributed to or caused the incident without attributing blame or responsibility. Include any explanations necessary from previous blocks.

Refer to aircraft using their call signs and to operational personnel by position or title, as appropriate. Do not name any individuals in the summary. For example, use "UAL1065" instead of "Aircraft #1." Use "R34," "Local Control," or "OSIC." The summary should be complete so that the reader does not have to refer back to other blocks for information on operational positions, aircraft identifications, etc.

REFERENCE specific times only when it is necessary to better describe the order of events. Use local times so the reader can better understand the time of day the events took place.

End the summary with a short (usually 4-5 lines) recap of the specific reasons the incident occurred.

Block 66 - INVESTIGATORS

Enter the dates the investigators reviewed the report. Investigators shall sign in the appropriate places to indicate they have reviewed the completed report.

Entering a date in the appropriate space will cause a "/s/" to be automatically entered in the associated signature space when printed.

The page with the original signature(s) shall be retained at the facility with the rest of the report. Copies of this page may contain a copy of the signature(s) or a "/s/" in the signature space(s).

PART II - Facility Manager Action

GENERAL INFORMATION

The facility manager's signature indicates that he/she has reviewed and concurs with the data submitted by the IIC and the investigative team (if applicable), and is satisfied that Part I of the final report is complete and sufficient to determines the following:

- **a**. The determination that the incident is an operational error or operational deviation.
- **b**. The category of the operational error/deviation and the reasons for category determination.
- **c**. Recommendations and actions to be taken to prevent a recurrence of the incident.
 - **d**. The causal factor(s) of the incident.

Block 67 - SELECT THE CATEGORY OF THE OPERATIONAL ERROR/DEVIATION

Select the category or categories that best describe(s) the cause(s) of the incident.

Select "ATCS" if one or more of the following is identified as either a causal or contributing factor:

a. An ATCS fails to adhere to procedures in or acts according to an individual misinterpretation of Orders 7110.65, 7110.10, or supplemental instructions.

Appendix 4

b. An ATCS demonstrates substandard performance not covered in a, above.

Select "MANAGER / SUPERVISOR / OTHER PERSONNEL" when an action or inaction of a manager(s), supervisor(s), or other personnel is identified as a causal factor or a contributing factor to the incident.

NOTE-

This category should not be used for an OE/OD involving a manager, supervisor, or other personnel performing regular ATCS duties, e.g., working an operational position for shift coverage, or currency time. Such incidents should instead be categorized as "ATCS."

Select "PROCEDURAL" if an established procedure was the primary cause or contributed significantly to the cause(s) of the incident. Do not complete blocks 14-18 for errors categorized as "PROCEDURAL".

Select "EQUIPMENT" if equipment failure was the primary cause or contributed significantly to the cause(s) of incident. Do not complete blocks 14-18 for errors categorized as "EQUIPMENT".

Block 68 - CAUSAL FACTORS

Select any box so that an "X" appears when the description identifies a causal factor of the incident. Select only items in column "A" so as to identify causal factors without reference to any particular employee.

EXAMPLE- If overlapping data blocks were a causal factor of the incident select the box in column "A" under section B (1) entitled "Overlapping data blocks." If a causal factor of the incident was the failure to coordinate correctly with a position within the same sector, select the box in Column "A" on the line in sector E (1) entitled "Intra-position."

If "Other" is selected, in any section and more room is needed for the explanation, use Block 65, Incident of Summary.

SECTION A: DATA POSTING

A data posting error is any error of calculation, omission, or incomplete data, erroneous entries, handling, or subsequent revisions to this data. This includes errors in posting and recording data. It does not include errors involved in receiving, transmitting, coordinating, or otherwise forwarding

this information. If one of the causal factors listed does not adequately describe the factor involved, list the factor under "Other" and provide a brief explanation.

SECTION B: RADAR DISPLAY

a. Misidentification

Radar misidentification means a failure to properly identify the correct target and includes subsequent errors committed after the original identification was properly accomplished. Indicate the listed item(s), which most closely describes the reason for misidentification. If one of the causal factors listed does not adequately describe the factor involved, list the factor under "Other" and provide a brief explanation.

b. Inappropriate Use of Displayed Data

A data or display information error occurs due to a failure to maintain constant surveillance of a flight data display or traffic situation and to properly use the information presented by the display or situation. If one of the causal factors listed does not adequately describe the factor involved, list the factor under "Other" and provide a brief explanation.

SECTION C: AIRCRAFT OBSERVATION (Towers Only)

An aircraft observation error means a failure to maintain constant surveillance of aircraft and the movement area, and to properly react to, interpret, or otherwise utilize, in a timely manner, the information being viewed. If one of the causal factors listed does not adequately describe the factor involved, list the factor under "Other" and provide a brief explanation.

SECTION D: COMMUNICATIONS ERROR

A communications error is a causal factor associated with the exchange of information between two or more people (e.g., pilots and specialists). It refers to the failure of human communication not communications equipment.

a. Phraseology

Use of incorrect or improper phraseology.

b. Transposition An error due to transposition of words, numbers, or symbols by either oral or

written means. This involves writing/saying one thing while thinking/hearing something else.

c. Misunderstanding

The failure to communicate clearly and concisely so that no misunderstanding exists for any actions contemplated or agreed upon.

d. Read back

The failure to identify improper or incorrect read back of information.

e. Acknowledgment

The failure to obtain or give an acknowledgment for the receipt of information.

f. Other

If the causal factors listed above do not adequately describe the factor involved, list the factor and provide a brief explanation.

SECTION E: COORDINATION

Any factor associated with a failure to exchange requirement information. This includes coordination between individuals, positions of operation, and facilities for exchange of information such as APREQs, position reports, forwarding of flight data, etc. If one of the causal factors listed does not adequately describe the factor involved, list the factor under "Other" and provide a brief explanation.

SECTION F: POSITION RELIEF BRIEFING

Relief briefing errors are special errors of both communication and coordination, which occur as the result of position relief. They include such things as failure to give a relief briefing, failure to request a briefing, incomplete or erroneous briefing, etc. If one of the causal factors listed does not adequately describe the factor involved, list the factor under "Other" and provide a brief explanation.

Block 69 - FACILITY MANAGER'S RECOMMENDATIONS AND CORRECTIVE ACTIONS

List recommendations and/or corrective actions that have been taken or will be taken to prevent a recurrence of a similar OE or OD.

The facility manager should address any written comments from the bargaining unit in this block.

The facility manager may use this block to explain the rationale behind any decisions or to comment on any part(s) of the investigation.

Record the local date (month/day/year) in the appropriate space that the facility manager, or his/her authorized representative, signed the report. Print or type the name of the facility manager in the appropriate space. The facility manager, or his/her authorized representative, shall sign in the appropriate space.

Entering a date in the appropriate space will cause a "/s/" to be automatically entered in the signature space when printed.

The page with the original signature shall be retained at the facility with the rest of the report. Copies of this page may contain a copy of the signature or a "/s/" in the signature space.

PART III - Air Traffic Division Manager

Block 70 - DIVISION MANAGER'S CONCLUSIONS AND RECOMMENDATIONS

If the ATD manager concurs with the recommendations and corrective actions taken by the facility manager, select the box at the top of the block so that an "X" appears in the box next to the sentence "We concur with the recommendations and corrective actions of the facility manager."

If the ATD manager does not concur with the recommendations and corrective actions taken by the facility manager, describe the differences of opinions.

Record the local date (month/day/year) in the appropriate space that the division manager, or his/her authorized representative, signed the report. Print or type the name of the division manager in the appropriate space. The division manager, or his/her authorized representative, shall sign in the appropriate space.

Entering a date in the appropriate space will cause a "/s/" to be automatically entered in the signature space when printed. The page with the original signature shall be retained at the division with the rest of the report. Copies of this page may contain a copy of the signature or a "/s/" in the signature space.

Appendix 5. Example of FAA Form 7210-3, Final Operational Error/Deviation Report

FAA FORM 7210-3, FINAL OPERATIONAL ERROR/DEVIATION REPORT (ATQA)

Final Operational Error/Deviation Report (ATQA) PART I. INVESTIGATIVE DATA					eport Number											
					1. Date		ne of incide		ſ	ſ		L	Time	(Loc	al)	
2. Responsible facility:		3. 8	Severity Inde	ex:	ро	ints				_			_			
Classification Level:		0000	В	_	Controlled		Ē	Co Sa	nve me	ergin Fligh	g, Opp g, Cro nt Pati Non-ir	ssing hs	Flig	ht Pa	ths	aths
4. Was weather a factor in the incide	_	□ N	0			5.	Altitude/fli	ight le	evel	ofi	ncide	nt:				
(If yes, explain in Block 65, Summary o	f Incident.)					\perp										
6. Type of airspace:						7.	Location	of Inc	ide	nt :						
☐ Class A☐ Class B	Class E					F	Fix:				In	terse	ction	:		
Class C Class D	Oceanic Airport Surfa	ace					Direction:					unwa				
Other							Distance:				Ta	axiwa	y:			
						L	ongitude: Area/Sector Position De	or	or							
8. Closest Proximity: Vertical Feet Lateral Miles Minutes N/A 9. Number of aircraft for whit control responsibility at the control responsibility at t						ch the	controller	had	П). Wa	ss?	Ye No	es		
Complete blocks 11-36 for each employe	ee								_							
11. Enter P for primary or C for	12. Num	ber of	f personnel	involved		13. E	Employee's	s facil	lity:	1						
contributory:						Thre	ee-letter	lden	tifi	icat	ion	Le	vel		Ту	/pe
14. Reserved:			1	5. Date of	of birth:			16.	So	cial	Secu	rity N	luml	ber:		
			N	MM/DD/YY	ΥΥ					Last	six diş	gits or	nly			
17. Indicate the performance level of the employee:	18. Last date recertifica		tification or on position:		19.		aining relev within the					t bee	n re	ceive	d	
Developmental ATCS Supervisor Staff Specialist Other If ATCS, how long since ATCS in current facility?	MM/D ☐ Initial Cei ☐ Recertific		lf ye				Yes No If yes, list the type and the date of that training in this block:							k:		
YY-MM																
19A. During the 2 1/2 years prior to the	ne incident, in hov	w man	y Operation	al Errors	has the	employ	yee been fo	ound (to b	e th	e prin	nary	caus	se?		
19B. During the 2 1/2 years prior to the	9B. During the 2 1/2 years prior to the incident, in how many Operational Errors has the employee been found to be contributory?															

Final Operational Error/Deviation Report Report Number					eport Number					T	\top	Τ	Τ
20. Is a medical certification lated to the incident? Yes No (If yes, explain in Block 65, S		21. Identify and being worke				22. Co Previo Sign in Currer Sign in	ous shift: gn out gn out						
23. Area of specialization:	24. Sector or position		on positio	n:	26. What secto position be								
27. Which associated positions were staffed at the time of the incident?													
28. Position function: Radar Radar Associate Hand-off Local Control Ground Control Flight Data Clearance Delivery Departure Position Arrival Position Supervisor Air Traffic Assistant Traffic Management Coordinator													
	onnel request assistar Yes No Block 65, Summary of In		dent? 30	Error	any operational pe /Deviation was dev Explain in Block 65	veloping Yes	? □	10		ре	eration	ıal	
	mplate taking corrective Yes No No 65, Summary of Inciden		32		ny operational personal person	Yes		lo		orr	ective	act	ion?
33. Operational personnel Equipment: Conflict Alert MSAW/EMSAW	Conflict Alert Self-identified Pilot												
34. Date and time operation		aware of the incide			Distance Referen ing) being used?	ce Indica	tor				Yes No		
☐Yes (Distractions include cons	36. Were there any distractions or environmental conditions that may have influenced the incident? Yes No (If yes, explain in Block 65, Summary of Incident.) (Distractions include construction, equipment installation, presence of visitors, loud or boisterous coworkers, equipment malfunction, and extraneous conversation with coworkers. Environmental conditions include ambient air, work area layout, temperature, noise, and lighting.)												

Final Operat	ional Error/Deviation F	Report	Re	port Number	П	П	\top	П			
Employee :	Continuation Page 2										
11. Enter P for primary or C 1 contributory:		of personnel involved:	13. Employee's facility: Three-letter Identification Level								
14. Employee identifier:		15. Date of	birth:	\neg	16. 3	Social S	Security	/ Numb	er:	\neg	
14. Employee identifier.		MM/DD/YYYY Last 6 digits only									
17. Indicate the performance le of the employee:	evel 18. Last date of c recertification		19. H	as training relev within the				en rece	eived		
Developmental ATCS Supervisor Staff Specialist Other If ATCS, how long since ATC in current facility? YY-MM	MM/DD/Y	ation	lfy	yes, list the type	10	date of t	hat traii	ning in	this blo	xok:	
19A. During the 2 1/2 years pr	ior to the incident, in how m	nany Operational Errors	has the e	employee been	found to	be the	prima	ry caus	se?		
19B. During the 2 1/2 years pr 20. Is a medical certification lated to the incident? Yes No (If yes, explain in Block 65, Sur	issue re- 21. I	any Operational Errors dentify and describe the being worked at the time	type of	work schedule	22. C Prev Sign	Current ious shi in ent shift	and pr	evious Sig	shift: gn out gn out		
23. Area of specialization:	24. Sector or position: Number and Name	25. Time on position Minutes	1:	26 . What sector position b							
27. Which associated position	27. Which associated positions were staffed at the time of the incident?										
28. Position function:	☐ Flight Data ☐ Cle ☐ Air Traffic Assistant ☐ Tra	earance Delivery	Hand-off Departure Tracker	e Position		Control	00	Groun Superv	d Cont	rol	

Final Operational Error/Deviation Report	Report Number							
Employee : Continuation Page 2								
29. Did any operational personnel request assistance prior to the incident? Yes								
31. Did the employee contemplate taking corrective action?	32. Did any operational personnel attempt to take corrective action?							
☐ Yes ☐ No	☐ Yes ☐ No							
(Explain in Block 65, Summary of Incident.) (Explain in Block 65, Summary of Incident.)								
33. Operational personnel were alerted to the incident by:								
Equipment: Personnel: Non-facility f	Personnel: Other:							
☐ Conflict Alert ☐ Self-identified ☐ Pilot								
MSAW/EMSAW Facility personnel Another	er facility							
34. Date and time operational personnel became aware of the incident:	35. Was the Distance Reference Indicator (i.e., J-Ring) being used?							
MM/DD/YYYY Time(local)	■ No							
36. Were there any distractions or environmental conditions that may h	ave influenced the incident?							
Yes No (If yes, provide explanation in the in	cident summary.)							
(Distractions includes construction, equipment installation, presence of visitors, loud or boisterous coworkers, equipment malfunction, and extraneous conversation with coworkers. Environmental conditions include ambient air, work area layout, temperature, noise, and lighting.)								

Final Operational Error/Deviation Re	port	Report Number		1	Т			Ī	$\overline{\top}$			
37. Was an OSIC or CIC on duty at the time of the incident Enter A for OSIC Enter C for CIC		38. Was the assigned OSIC/CIC present in the operational area at the time of the incident? Yes No										
39. Did the employee require OSIC/CIC assistance prior to ☐ Yes ☐ No	the incident?	40. Did the assigned OSIC/CIC provide assistance? Yes No (Explain in Block 65, Summary of Incident.)										
41. If sectors were combined, did the OSIC/CIC approve the		42. If the positions were combined, did the OSIC/CIC approve the combination? No Not combined										
43. In what activity was the assigned OSIC/CIC engaged a dent? General Supervision Administering tra Direct operational supervision Receiving trainin Working a position of operation Other	44. Was the OS ization wher	e the incid		took p	lace							
45. Traffic complexity? 1 2 3 4 5 Low Avg. High	46. Indicate which factors Weather Terrain Airspace configuration Number of aircraft Experience level Emergency situation	Rui	nway confi nway cond w control ecial Event	igurati lition								
47. Type of Control Provided Radar AFSS/FSS Tower TFM Oceanic Non-radar	48. Required separation was by: FAA Order Facility Letter of Agreement (LOA) or Directive FAA Order: Facility LOA/Directive: Paragraph: Paragraph:											
49. Were any deficient procedures noted as a result of the incident? Yes No (If yes, explain here)	104-015 1015 (0.0010101010101010101010101010101010101	Paragraph: re any special procedures in effect at the time of the incident i. Traffic Management Program)? Yes (if yes,explain here)										

Final Operational Error/Deviation Report Compare abloaded section from their beautiful as in an investigation of section from their beautiful as investigation of all craft (Vehicle No. 2)							-	1	-	1 1		-	_		
St. Identification	Final Operat														
Aircraft/Vehicle No. 1 Aircraft/Vehicle No. 2 52. Identification 53. Prefix/type/audifix 54. Fight/whicle profile at time of time of limited in Touching down Ratar vector Touching down Level flight Takeoff roll Touching down Level flight Takeoff roll Touching Climbing C	51 Number of aircraft/vehicles in		iai sections il filore triali	WO dil Ci dits di	re ilivoiveu)										
S3. Prefix/bye/suffix	ST. Namber of an oral overlines in		ehicle No. 1				Air	craf	t/Vehi	cle N	lo. 2				
S4. Flight/whiche profile at time of lime of incident Descending Radar vector Touching down Radar vector Touching down Level flight Touching down Lavel flight Touching down Lavel flight Takeoff roil Takeof	52. Identification														
at time of time of incident Touching down	53. Prefix/type/suffix														
56. TCAS equipped Yes	100 to 10	Touching down Ra Level flight Ta Taxiing-runway La Climbing Ho	adar vector keoff roll nding roll	runway	Touchi Level f Taxiing	ing dow light g-runwa			Radar v Takeoff Landing	vector froll groll		n rur	ıway		
57. Evasive action	55. Aircraft ground speed	□ N/A _		Knots	□N/A							Kno	ots		
St. Did the pilot file a Near Midair Collision Report	56. TCAS equipped	☐ Yes ☐ No	☐ Unknow	/n	☐ Yes			No			Unkno	wn			
Midair Collision Report	57. Evasive action	Yes No TCA	S Unknow	n .	☐ Yes	ПΝ	。 [□ то	CAS		Unkno	wn			
Terrain Vehicle(s) Personnel Obstruction Equipment Protected Airspace	Section of the sectio	Yes No	Unknow	n	Yes			lo			Unkno	₩n			
62. System(s) in use: HOST	60. Was equipment layout or de	Airport Movement Area (explain) Not applicable Other (explain) 60. Was equipment layout or design a factor in the incident? 61. Was any pertinent equipment reported as functioning unsatisfactorily													
HOST	62 System(s) in use														
Yes No (if yes, explain here) Activated Not available Not activated Not Installed Suppressed 64a. What was the status of the AMASS or ASDE at the time of the incident?	HOST EBUS/HOST (FDP) EBUS URET Mode S	□ ASR-9 □ ASR-11 □ ARTS IIE □ ARTS IIIA □	MEARTS ACDs on ARTS STARS on ARTS STARS	ļ	BRITE IV. AMASS ASDE III ASDE III	,			Mod OA Oth	del 1 SIS ner:					
Not Installed Suppressed 64a. What was the status of the AMASS or ASDE at the time of the incident?	63. Was radar transition from on-	e system to another in progress?	64.	What was t	the status of	the Co	nflict Al	ert at	the time	e of th	e incid	ent?			
64a. What was the status of the AMASS or ASDE at the time of the incident?	Yes No	(if yes, explain here)	1	Activate	ed 🔲 N	ot avail	able [] No	ot activa	ted					
THE CONTRACT AND ADDRESS OF THE CONTRACT A	I □ No				talled 🔲 S	uppress	sed								
			64a	<u></u>							e of the	incid	dent?		

Final Operational Error/Deviation Report

	Additional aircraft sections	
51. Number of aircraft/vehicles in	nvolved in the incident:	
	Aircraft/Vehicle No.	Aircraft/Vehicle No.
52. Identification		
53. Prefix/type/suffix		
54. Flight/vehicle profile at time of incident	Descending Making approach Touching down Radar vector Level flight Takeoff roll Taxiing-runway Landing roll Climbing Holding in position on runway Other	Descending Making approach Touching down Radar vector Level flight Taxing-runway Landing roll Climbing Holding in position on runway Other
55. Aircraft ground speed	□ N/A Knots	□ N/A Knots
56. TCAS equipped	Yes No Unknown	Yes No Unknown
57. Evasive action	Yes No TCAS Unknown	Yes No TCAS Unknown
58. Did the pilot file a Near Midair Collision Report	Yes No Unknown	Yes No Unknown
	Additional aircraft sections	
51. Number of aircraft/vehicle in	volved in the incident:	
	Aircraft/Vehicle No.	Aircraft/Vehicle No.
52. Identification		
53. Prefix/type/suffix		
54. Flight/vehicle profile at time of incident	Descending Making approach Touching down Radar vector Level flight Takeoff roll Taxiing-runway Landing roll Climbing Holding in position on runway Other	Descending Making approach Touching down Radar vector Level flight Takeoff roll Taxiing-runway Landing roll Climbing Holding in position on runway Other
55. Aircraft ground speed	□ N/A Knots	□N/A Knots
56. TCAS equipped	Yes No Unknown	Yes No Unknown
57. Evasive action	Yes No TCAS Unknown	Yes No TCAS Unknown
58. Did the pilot file a Near Midair Collision Report	Yes No Unknown	☐Yes ☐ No ☐ Unknown
FAA Form 7210-3 (09/06) Supersedes Pre	evious Edition	Page 4a

Report Number

Final Operational Error/Deviation Report	Report Number			T		
65. SUMMARY OF INCIDEN	IT*					

Final Operational Error	Deviation Report	Report Number	
	65. SUMMARY OF INCIDENT (con	tinued from page 5)	
	66. INVESTIGATOR	ne e	
	66. INVESTIGATOR	10	
Date	Typed/Printed Name		Signature
MM/DD/YYYY	First/MI/Last Name		Investigator-in-Charge
MM/DD/YYYY	First/MI/Last Name		Team Member
MM/DD/YYYY	First/MI/Last Name		Team Member
MM/DD/YYYY	First/MI/Last Name		Team Member
MM/DD/YYYY	First/MI/Last Name		Team Member
MM/DD/YYYY	First/MI/Last Name		Team Member
MM/DD/YYYY	First/MI/Last Name		Team Member
MM/DD/YYYY	First/MI/Last Name		Team Member
	, noting East Hairing		Toditi MoffiDGI
MM/DD/YYYY	First/MI/Last Name	—	
WINDO/TTTT	I II SU WII/Last Ivallic	I	Team Member

Final Operational Error/Deviation Report	Report Number				
65. SUMMARY OF INCIDENT (continue	ed from page 6)				

Final Operational Error/Deviation Report	Report Number						
							_
Part II. FACILITY MANAGER ACTION							
67. Select the classification of the OE/OD. (More than one category may be selected.)							_
☐ Human ATCS ☐ Manager/Supervisor/Other Personnel ☐ Proce	edural Equipment	. 1	☐ Oth	er (Exi	olain in	Block	(69)
68. Causal Factors	No	·	Yes	1, 1,2-1,4			
		А					_
A. Data Posting		+	1				
(1) Computer Entry	 		1				
Incorrect input		\top	1				
Incorrect update		1=	1				
Premature termination of data		吉	1				
Input/Update not made		ᆂ	1				
Other (explain);		+-	ł				
		1_					
(2) Flight Progress Strip		+-	ł				
Not updated		+-	ł				
Interpreted incorrectly		무	ł				
Posted incorrectly		무	ł				
Updated incorrectly		ᆂ	ł				
Prematurely removed		ᆂ	ł				
Other (explain):		+-	ł				
Carlo (Capallary)							
B. Radar Display		-	ļ				
(1) Misidentification		+	ł				
Failure to re-identify aircraft when the accepted target identity becomes questionable		╁	ł				
Overlapping data blocks		╁╬╴	ł				
Acceptance of incomplete or difficult to correlate position information		十古	1				
Other (explain):		+-	1				
(2) Inappropriate Use of Displayed Data		_	ļ				
MODE C			ł				
BRITE		╁╬	ł				
Conflict alert		ᆂ	ł				
Failure to detect displayed data			1				
Failure to comprehend displayed data			1				
Failure to project future status of displayed data			1				
Other (explain):			1				
C. Aircraft Observation (Towers Only)			-				
(1) Actual Observation of Aircraft		 -	ł				
(2) Improper Use of Visual Data		+-	1				
Landing		\vdash	1				
Taking Off		+=	i				
Ground Operation		T-	1				
Taxiing across runway		╅	1				
Holding in position for takeoff		1=	1				
Other (explain):		+=	1				

Final Operational Error/Deviation Report	Report Number		
	No	Τ	Yes
		Α	
D. Communication Error			
(1) Phraseology			
(2) Transposition			
(3) Misunderstanding			
(4) Read back			
Altitude			
Clearance			
Identification		+=	
Other (explain):		+-	
(5) Acknowledgement			
(6) Other (explain):		_	
E. Coordination			
(1) Area of Incident			
Intra-sector/position		\vdash	
Inter-sector/position			
Inter-facility		ᆸ	
Facility type: Level: and facility ID:		+-	
(2) Failure to use/comply with precoordination information			
		+	
(3) Improper use of information exchanged in coordination		+-	
Aircraft Identification		+-	
Altitude/Flight Level Route of Flight		+-	
Speeds		믐	
APREQs		ᆂ	
Special Instructions		+=	
Other (explain):		+-	
(4) Failure to coordinate between ground and local control			
Crossing active runway			
Vehicle, equipment, or personnel on active runway			
Use of runway other than active runway for arrival and departures			
Runway closure			
Other (explain):			
F. Position Relief Briefing		+	
(1) Employee did not use position relief checklist		\vdash	
(2) Employee being relieved gave incomplete briefing		╁	
(3) Relieving employee did not make use of pertinent data exchanged at briefing		古	
Other (explain):			

Final Operational Error/		Report Number					
69. FACIL	ITY MANAGER'S RECOMMENDATION	S AND CORRECTIVE ACT	IONS				
Date	Typed/Printed Name of Facility Mana	ager	s	ignat	ture		
MM/DD/YYYY	First/MI/Last Name	_					

Page 11

Final Operational Error/Deviation Report	Report Number					
69. FACILITY MANAGER'S RECOMMENDATIONS AND CORREC	CTIVE ACTIONS (continued	from pag	je 10)		

Final Operational Error/	Deviation Report	Report Number					
Part III. SERVICE AREA DIREC	TOR				<u> </u>	1 1	
	CE AREA DIRECTOR'S CONCLUSION	S AND RECOMMENDAT	IONS				
	es not apply to OE/ODs attributed to cor						
☐ I conc	ur with the recommendations and correc	tive actions of the facility m	anager.				
1							
Date	Typed/Printed Name of Service Area [Director	Sign	ature			
	176-04 Filling Maille of Gervice Area L	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	oign				
MM/DD/YYYY	First/MI/Last Name						

Final Operational Error/Deviation Report	Report Number					
70. SERVICE AREA DIRECTOR'S CONCLUSIONS AND REC	OMMENDATIONS (continu	ed fron	n pag	e12)		

APPENDIX 9. NON-WAKE SEPARATION CONFORMANCE CATEGORIZATION

Figure 9-1: Non-Wake Separation Conformance Categorization

100% 90% 80% 75% 70% 60% Vertical Separation 50% Retained B 40% 34% 30% 20% 10% 34% 75% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Horizontal Separation Retained

Page 1

APPENDIX 10. SEPARATION CONFORMANCE CLASSIFICATION TOOL

Figure 10-1: Separation Conformance Classification Tool

https://aapasp2.faa.gov - Separation Conformance Calculator -

Separation Conformance Calculator

	*Actual Separation	Required Separation				
Vertical	ft	1000 💌 ft				
Horizontal	nm	3 💌 nm				
Wake Event	No 💌					

Combined Percentage:

Calculate Reset

This tool is available at the following FAA intranet site:

http://atqa.faa.gov/ (then select) Training

Figure 10-2: Multiple Return Separation Conformance Tool

Separatio	on Conformance	Calculator -
Wake Event	No 💌	
	Vertical	Horizontal
Required Separation	1000 v ft	3 v nm
Actual Separation		
1	ft	nm
2	ft	nm
3	ft	nm
4	ft	nm
5	ft	nm
6	ft	nm
7	ft	nm
8	ft	nm
Rating:		"
	Calculate Reset	

This tool will be available at the following FAA intranet site once approved:

http://atqa.faa.gov/ (then select) Training

APPENDIX 11. CONFORMANCE CATEGORIZATION TABLES

Conformance Categorization Tables

The Conformance Category for non-wake incidents may be determined by reference to the measured remaining vertical and horizontal separation. The following tables provide the Conformance Categories based on remaining separation for the 2.5 NM/1000 feet, 3 NM/1000 feet, 5 NM/1000 feet, and 5 NM/2000 feet (RVSM) separation requirements, respectively:

a. 2.5 NM separation, 1000 foot minima, non-wake:

					Ver	tical				
Lateral	0	100	200	300	400	500	600	700	800	900
	feet	ft	ft	ft	ft	ft	ft	ft	ft	ft
2.49- 2.25 NM	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE
2.24- 1.88 NM	C	C	C	C	C	C	C	C	C	PE
1.87- 1.86 NM	В	C	C	C	C	C	C	C	C	PE
1.85- 1.81 NM	В	В	C	C	C	C	C	C	C	PE
1.80- 1.72 NM	В	В	В	C	C	C	C	C	C	PE
1.71- 1.59 NM	В	В	В	В	C	C	C	C	C	PE
1.58- 1.40 NM	В	В	В	В	В	C	C	C	C	PE
1.39- 1.13 NM	В	В	В	В	В	В	C	C	C	PE
1.12- 0.85 NM	В	В	В	В	В	В	В	C	C	PE
0.84- 0.82 NM	A	В	В	В	В	В	В	C	C	PE
0.81- 0.69 NM	A	A	В	В	В	В	В	C	C	PE
0.68 NM	A	A	A	В	В	В	В	С	С	PE
0.67- 0.40 NM	A	A	A	В	В	В	В	В	С	PE
0.39- 0.00 NM	A	A	A	A	В	В	В	В	C	PE

b. 3 NM separation, 1000 foot minima, non-wake:

					Ver	tical				
Lateral	0 feet	100 ft	200 ft	300 ft	400 ft	500 ft	600 ft	700 ft	800 ft	900 ft
2.99- 2.70 NM	PE									
2.69- 2.25 NM	C	C	C	C	C	C	C	C	C	PE
2.24- 2.23 NM	В	С	С	С	С	С	С	С	С	PE
2.22- 2.17 NM	В	В	С	C	C	C	C	C	С	PE
2.16- 2.07 NM	В	В	В	C	C	C	C	C	С	PE
2.06- 1.91 NM	В	В	В	В	C	C	C	C	С	PE
1.90- 1.68 NM	В	В	В	В	В	C	С	С	С	PE
1.67- 1.35 NM	В	В	В	В	В	В	C	С	С	PE
1.34- 1.02 NM	В	В	В	В	В	В	В	C	С	PE
1.01- 0.98 NM	A	В	В	В	В	В	В	C	С	PE
0.97- 0.83 NM	A	A	В	В	В	В	В	С	С	PE
0.82- 0.81 NM	A	A	A	В	В	В	В	C	С	PE
0.80- 0.48 NM	A	A	A	В	В	В	В	В	С	PE
0.47- 0.00 NM	A	A	A	A	В	В	В	В	С	PE

c. 5 NM separation, 1000 foot minima, non-wake:

					Ver	tical				
Lateral	0 feet	100 ft	200 ft	300 ft	400 ft	500 ft	600 ft	700 ft	800 ft	900 ft
4.99- 4.50 NM	PE									
4.49- 3.75 NM	С	C	C	C	C	C	C	C	C	PE
3.74- 3.72 NM	В	C	С	C	C	С	C	C	С	PE
3.71- 3.62 NM	В	В	С	С	С	С	С	С	С	PE
3.61- 3.44 NM	В	В	В	С	С	С	С	С	С	PE
3.43- 3.18 NM	В	В	В	В	С	С	С	С	С	PE
3.17- 2.80 NM	В	В	В	В	В	С	С	С	С	PE
2.79- 2.25 NM	В	В	В	В	В	В	С	С	С	PE
2.24- 1.70 NM	В	В	В	В	В	В	В	С	С	PE
1.69- 1.63 NM	A	В	В	В	В	В	В	С	С	PE
1.62- 1.38 NM	A	A	В	В	В	В	В	С	С	PE
1.37- 1.35 NM	A	A	A	В	В	В	В	С	С	PE
1.34- 0.80 NM	A	A	A	В	В	В	В	В	С	PE
0.79- 0.00 NM	A	A	A	A	В	В	В	В	С	PE

d. 5 NM separation, 2000 foot minima, non-wake:

					Ver	tical				
Lateral	0	100	200	300	400	500	600	700	800	900
4.99-	feet	ft								
4.50 NM	PE									
4.49- 3.75 NM	С	C	C	C	C	C	C	C	C	C
3.74- 3.72 NM	В	В	C	C	C	C	C	C	C	C
3.71- 3.68 NM	В	В	В	C	C	C	C	C	C	C
3.67- 3.62 NM	В	В	В	В	C	С	C	C	C	C
3.61- 3.54 NM	В	В	В	В	В	C	C	C	C	C
3.53- 3.44 NM	В	В	В	В	В	В	C	C	C	C
3.43- 3.32 NM	В	В	В	В	В	В	В	C	C	C
3.31- 3.18 NM	В	В	В	В	В	В	В	В	С	С
3.17- 3.00 NM	В	В	В	В	В	В	В	В	В	С
2.99- 1.70 NM	В	В	В	В	В	В	В	В	В	В
1.69 NM	A	В	В	В	В	В	В	В	В	В
1.68- 1.63 NM	A	A	В	В	В	В	В	В	В	В
1.62- 1.53 NM	A	A	A	В	В	В	В	В	В	В
1.52- 1.38 NM	A	A	A	A	В	В	В	В	В	В
1.37- 1.16 NM	A	A	A	A	A	В	В	В	В	В
1.15- 0.80 NM	A	A	A	A	A	A	В	В	В	В
0.79- 0.00 NM	A	A	A	A	A	A	A	В	В	В
						tical				
Lateral	1000 feet	1100 Feet	1200 feet	1300 feet	1400 feet	1500 feet	1600 feet	1700 feet	1800 feet	1900 feet
4.99- 4.50 NM	PE									
4.49-	С	С	С	С	С	С	С	С	PE	PE
2.80 NM 2.79-	В	С	С	С	С	С	С	С	PE	PE
2.55 NM 2.54-	В	В	C	C	C	C	C	C	PE	PE
2.25 NM 2.24-	В	В	В	C	C	C	C	C	PE	PE
1.88 NM										
1.87- 1.35 NM	В	В	В	В	С	С	С	С	PE	PE
1.34- 0.00 NM	В	В	В	В	В	C	C	C	PE	PE

The Conformance Category for wake turbulence incidents may be determined by reference to the measured lateral separation only:

4 NM Horizontal

C	3.99 - 3.40
equals	NM
B	3.39 - 2.80
equals	NM
A	≤ 2.79
equals	NM

5 NM Horizontal

C	4.99 - 4.25
equals	NM
B	4.24 - 3.50
equals	NM
A	≤ 3.49
equals	NM

6 NM Horizontal

C	5.99 - 5.10
equals	NM
B	5.09 – 4.20
equals	NM
A	≤ 4.19
equals	NM

APPENDIX 12. FAA FORM 7210-6 PROXIMITY EVENT INVESTIGATIVE REPORT FORM

Proximity Event Form

Proximity Events (PE) records will include the following items:

- a. Date and Time of PE
- **b.** PE Location (geographic & assigned work location)
- c. PE proximity
- d. Required Separation at time of PE
- **e.** PE reported by (facility)
- **f.** PE was detected by.....
- g. Traffic Volume at time of PE
- h. Traffic Complexity at time of PE
- i. Contributory Factors to PE
- **j.** Type of Control at time of PE
- k. Aircraft identifications, types, routes, TCAS RA (Yes, No)
- 1. Name of submitter, & date/time of PE report

The PE form and instructions are found at -

http://atqa.faa.gov/atqatraining/logon.jsp

- a. Click on Logon
- **b.** Left side has a pull-down menu for "blank reports"
- c. Select "Proximity Event"
- d. Click on "print"

Form 7210-6 and instructions for completion follow.

				Report Number											
ATC PROXIMITY EVENT				-		-		-	P	_					
INVESTIGATIVE REPORT		RT	FAC ID - TYP		TYPE	-	CY	-	P	<u> </u>		SEQ	#		
1. DATE AND TIME OF EVENT:					2. EVENT LOCATION (COMPLETE ONE):										
DATE (LOCAL):	TIME	E (LOCAL):	TIME (UTC):	FIX/RADIAL/DME: / / AIRPORT LOCATION:					LAT: ° ' " LON: ° ' " OTHER:						
3. PROXIMITY (CLOSEST): 4. EVENT REPORTED BY:				5. ALERTS:											
CONTRO		ATION/OEDP LLER/OTHER PERSONNEL ILITY & (FAC ID):	CONFLICT ALERT: ACTIVATED SUPPRESSED NOT ACTIVATED NOT AVAILABLE NOT INSTALLED			T:	MSAW/EMSAW: ACTIVATED SUPPRESSED NOT ACTIVATED NOT AVAILABLE NOT INSTALLED					TMU: MAP: ACTIVATED SUPPRESSED NOT ACTIVATED NOT AVAILABLE NOT INSTALLED			
6. TRAFFIC VOLU	J M E (#	of ACFT):	TRAFFIC	COMPLE	EXIT	Y:		(Low-	1 2 3	4 5	-Higl	1)			
		VES IN PLA , EXPLAIN:	CE IN RESPONSE TO	O SECTO	R/P0	OSIT	ION V	'OLU	ME OR	CO	MPL	EXI	ΤYʻ	?	
8. POSSIBLE CON	TRIBU	TORY FAC	TORS (CHECK ALL APPLI	CABLE):											
□ PROCEDURAL □ EQUIPMENT □ COMPRESSION □ TRAFFIC MANAGEMENT □ COMMUNICATION (HEARBACK/READBACK) □ WEATHER □ OTHER							CK)								
9. TYPE OF CONTROL: RADAR 10. REQUIRED SEPARATION: FAA DIRECTIVE REQUIRED SEPARATION: / ORDER #/Para:															
☐ (A)FSS			VMC ☐ IMC ☐	DUSK	П	DAW	/NΙ								
` ′	12. EMPLOYEE INFORMATION:														
ъ.	□ 1		Contributory	,		C .			2		C .	.,	[\Box_{A}	
a. TITLE (ATCS/DEV/	CIC/SUP	VR/MGR/TMC/S	Continuatory			Contr	ibutory		,		Cont	abuto	ry	4	
b. AREA/SECTOR/POSITION WORKING DURING EVENT:															
c. TIME ON POSIT	ION IN	N AREA/SEC	TOR/POSITION (IN MI	INUTES):											
13. AIRCRAFT INI	FORM.	ATION:		T					1						
			AIRCRAFT#2 ID: ☐ NRP ☐ NMAC ☐ TO	AIRCRAFT#3 ID: AIRCRAFT#4 ID: CAS RA □ NRP □ NMAC □ TCAS RA □ NRP □ NMAC □					□ TCA:	SRA					
b. AIRCRAFT MA							1,1,11,10								J 10.1
c. AIRCRAFT RO	OUTE (OF FLIGHT:													
14. ADDITIONAL INFORMATION:															
15. PERSON MAK	ING E	VENT NOTI	FICATION:												
FACILITY ID:			NAMF.		1.00	'AL DA	TF.			LOCA	AL TIM	Œ.			

Instructions for Completing FAA Form 7210-6 Proximity Event Investigative Report

	REPORT NUMBER – enter the FAC ID – three character facility identifier; TYPE – single-letter code for facility type ("T" – terminal, "R" – stand-alone radar facilities, or
	TRACONs; "C" – en route ARTCC); CY – last two digits of the calendar year for incident;
	SEQ # - sequential number of the type incident for current calendar year; <i>Note:</i> each
	calendar year, the Proximity Event (PE) numbers will start with 001 and count up with each subsequent PE
1	DATE & TIME – enter the local date, local time, & Coordinated Universal Time (UTC)
2	EVENT LOCATION – enter the nearest position designator or the NAVAID radial/miles; enter the Area/Sector name; enter the Latitude (degrees/minutes/seconds) and Longitude (degrees/minutes/seconds)
3	PROXIMITY – enter the Closest Proximity; FT for vertical separation, & NM for lateral separation
4	REPORTED BY – check the appropriate box; enter the three character facility identifier if "Other Facility" is checked; enter two or three word explanation if "Other" is checked
5	DETECTED BY – check the appropriate boxes under Conflict Alert, MSAW/EMSAW, and OEDP/TARP
6	TRAFFIC VOLUME & COMPLEXITY – enter the number of aircraft in the Area/Sector; enter the relative Complexity – Low-1 – $2 - 3 - 4 - 5$ -High
7	INITIATIVES IN-PLACE – check (Yes, No) if traffic initiatives were active in the Area/Sector, and provide the MAP number
8	POSSIBLE CONTRIBUTORY FACTORS – check the appropriate box; enter two or three word explanation if "Other" is checked
9	TYPE CONTROL – check the appropriate box for the facility
10	REQUIRED SEPARATION – check the box (if applicable), &enter the Order number on the far right-hand side; fill-in the Vertical requirement (FT), and the Lateral requirement (NM)
11	WEATHER – check the appropriate box
12	CONTROLLER(s) INFORMATION – (a) enter the Position (abbreviations on Form) title for each controller listed; (b) enter the active Area/Sector Position for each controller listed; (c) enter the Time-on-Position (TOP) for each controller listed in minutes (maximum of four controllers)