



U.S. Department
Of Transportation

**Federal Aviation
Administration**

7210.56C

Air Traffic Quality Assurance

This Web version contains Change 2, dated 7/20/2009



Distribution: ZAT-721

August 15, 2002

Prepared by the Air Traffic
Evaluations and Investigations Staff,
AAT-20

CHANGE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

JO 7210.56C
CHG 2

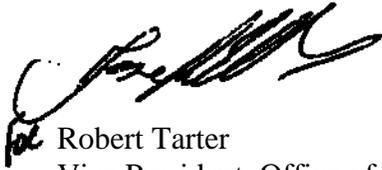
Air Traffic Organization Policy

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 13 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
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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 l 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.

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.

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.

CHANGE

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

**JO 7210.56C
CHG 1**

Air Traffic Organization Policy

Effective Date:
August 4, 2008

SUB: Air Traffic Quality Assurance

- 1. Purpose of This Change.** This change transmits revised pages to Federal Aviation Administration Order JO 7210.56C, Air Traffic Quality Assurance.
- 2. Audience.** This change applies to the following Air Traffic Organization (ATO) service units: En Route and Oceanic, Terminal, Safety, System Operations Services; service center offices; all air traffic control facilities; all federal and non federal contract facilities.
- 3. Where Can I Find This Change?** The notice is available on the MYFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices/ and on the air traffic publications Web site at http://www.faa.gov/airports_airtraffic/air_traffic/publications.
- 4. Explanation of Policy Changes.** This change includes editorial corrections and incorporates N JO 7210.661, Terminal/TRACON Audit Process for Operational Errors & Operational Deviations, effective May 23, 2007; N JO 7210.663, Operational Error Reporting, Investigation, and Severity Policies, effective June 25, 2007; N JO 7210.682, Operational Error Reporting, Investigation, and Severity Policies, effective March 17, 2008.
- 5. Distribution.** This change is distributed to the following ATO service units: En Route and Oceanic, Terminal, Safety, System Operations Services; service center offices; 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, Safety Services
Air Traffic Organization

PAGE CONTROL CHART

REMOVE PAGES	DATED	INSERT PAGES	DATED
iii through iv (TOC)	8/15/02	iii through v (TOC)	8/04/08
1-1 through 1-4	8/15/02	1-1 through 1-4	8/04/08
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6-1 through 6-4	8/15/02	6-1	8/04/08
		8-1	8/04/08
Appendix 1 (1-1 through 1-2)	8/15/02	Appendix 1 (1-1 through 1-2)	8/04/08
		Appendix 13 - 16	8/04/08

Air Traffic Control Explanation of Changes

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

a. 4-1-7 SPILL OUTS

This paragraph was changed to reflect the change in organizational responsibilities within the Air Traffic Organization (ATO), the telephone number used to submit spill out reports, and the e-mail address to electronically report spill outs.

- b. 5-1-1 **DEFINITIONS;**
- 5-1-2 **SUSPECTED EVENT;**
- 5-1-3 **INITIAL INVESTIGATIONS;**
- 5-1-4 **MULTIPLE LOSSES OF SEPARATION OR MULTIPLE DEVIATIONS DURING A SINGLE EVENT;**
- 5-1-5 **INVESTIGATIVE PROCESS;**
- 5-1-6 **ATM RESPONSIBILITIES;**
- 5-1-7 **RECLASSIFICATION;**
- 5-1-8 **PERFORMANCE BASED ACTIONS;**
- 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;**
- 5-1-13 **FINAL REPORTS;**
- 5-1-14 **ENTRIES IN TRAINING & PROFICIENCY RECORD;**
- 5-1-15 **DOCUMENTATION RETENTION;**
- 5-1-16 **FACILITY, HEADQUARTERS, & SERVICE UNIT RESPONSIBILITIES;**
- 5-1-17 **ATO SAFETY SERVICES INVESTIGATIONS;**
- 5-1-18 **ANALYSIS & FOLLOW-UP ACTIONS**

This change incorporates Notice N JO 7210.682 and Notice N JO 7210.663 into the full document. Paragraph 5-1-4 has been revised to clarify the intent when filing multiple reports for single events involving OEs, ODs, and PEs. These changes implement the separation conformance method of categorizing the conformance of operational errors (OE), and creates a new category of incident (Proximity Event). These changes emphasize transition to an outcome based conformance

classification and provide standard processes that will give greater transparency and ultimately increased understanding by our customers, owners and employees.

c. 6-1 CONFORMANCE CATEGORIES

The title of chapter 6 was changed from Severity Index to Conformance Categories to reflect the change from using the term severity to conformance throughout the document.

d. 6-1-1 DEFINITIONS

This change incorporates Notice N JO 7210.663 into the full document. These changes implement the separation conformance method of categorizing the conformance of operational errors (OE), and creates a new category of incident (Proximity Event) to identify and track the most minor of airborne non-wake turbulence losses of separation.

e. 8-1-1 BACKGROUND

- 8-1-2 **FACILITY AUDIT PROCESS;**
- 8-1-3 **SAFETY ASSURANCE OFFICE RANDOM AUDIT**

This change incorporates Notice N JO 7210.661 into the full document. These changes implement the addition of facility audits and random audits, adds allowance to use playback tools to identify OE/ODs, and ensures that all OE/ODs are being reported as validation of the strength of local assurance programs.

f. APPENDICES 13 – 16

The original Appendix 13 (Operational Error/Deviation Handling Procedures and Return to Operational Duty) was deleted and the following appendices have been added:

- APPENDIX 13 – NON-WAKE SEPARATION CONFORMANCE CATEGORIZATION**
- APPENDIX 14 – SEPARATION CONFORMANCE CLASSIFICATION TOOL**
- APPENDIX 15 – CONFORMANCE CATEGORIZATION TABLES**
- APPENDIX 16 – PROXIMITY EVENT FORM**

FOREWORD

This order is derived from a mutual goal of addressing quality efforts at the national, regional, facility and individual level. It provides specific guidance on investigation, reporting and recording types of incidents that impact the quality of air traffic services. This order represents several new ways of addressing quality assurance in a manner designed to improve the system. All concerned personnel shall familiarize themselves with the provisions pertaining to their responsibilities.

Linda M. Schuessler
Manager, Air Traffic Evaluations and Investigations Staff, AAT-20

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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 1. GENERAL

1-1-1. PURPOSE

This order provides specific direction for the reporting, investigation, and recording of air traffic incidents. Additional guidance is provided for the identification and correction of performance deficiencies through establishing a quality assurance program at the facility and regional level. This order is designed to work in concert with current Federal Aviation Administration (FAA) Orders concerning facility evaluations, air traffic technical training, performance management systems, and bargaining unit contractual agreements.

1-1-2. DISTRIBUTIONS

This Order is distributed to selected offices in Washington Headquarters, Regional Offices, the William J. Hughes Technical Center, the David J. Hurley Air Traffic Control System Command Center, and the Mike Monroney Aeronautical Center. Also, copies are sent to all air traffic control facilities, all international aviation field offices, and the interested aviation public.

1-1-3. CANCELLATION

This revision cancels FAA Order 7210.56B, Air Traffic Quality Assurance, dated June 15, 2001.

1-1-4. EXPLANATION OF CHANGES

Numerous editorial and formatting changes were made where necessary. The significant changes encompass several Memorandums of Understanding (MOU) with the National Air Traffic Controllers Association (NATCA) and policy memorandums from the Director of Air Traffic, AAT-1. Brief explanations of these changes are listed below. If further information is desired, direct questions through the appropriate facility/regional staff to AAT-20.

a. 2-1-2 a. (4) Quality Assurance Programs Responsibilities, establishes the requirement for AAT-20 to conduct formal investigations for facilities with high or increasing numbers of operational errors or incidents.

b. 2-1-2 a. (5) Quality Assurance Programs Responsibilities, establishes recognition for facilities that achieve a million error free operations.

c. 2-1-2 b. Quality Assurance Programs Responsibilities, adds several more requirements and/or responsibilities for each Regional Air Traffic Division (ATD) Manager. These new requirements have been adopted from policy memorandums distributed by the Director of Air Traffic, AAT-1 and include:

(1) Provide a copy of all Regional and Facility Quality Assurance (QA) Orders and Operational Error/Deviation (OE/OD) prevention plans to AAT-20.

(2) Annually review all QA and OE/OD prevention plans.

(3) Ensure a "Back to Basics" approach is included in each OE/OD prevention plan.

(4) Ensure each facility's OE/OD prevention plan is facility specific.

(5) Ensure regional/facility OE/OD prevention plans provide the means to identify and correct non-compliance or eliminate future non-compliance.

(6) Provide trend analysis, statistical data and recommendations to assist facilities with their prevention efforts.

(7) Establish methods for early identification of facility trends in order to raise awareness. OE/OD rates per 100,000 operations will be tracked and distributed to heighten awareness.

(8) Ensure towers include a comprehensive plan to prevent surface incidents in their facility runway incursion prevention plan.

d. 3-1-2. Technical Training Discussions Definitions, adds the definitions of controller proficiency and performance.

e. 3-1-3. a. (1) Technical Training Discussions Responsibilities, redefines the use of certified radar playback tools as a performance management tool.

f. 3-1-3. a. (3) Technical Training Discussions Responsibilities Note, explains the intent of Technical Training Discussions (TTD) is to provide first level supervisors a formal venue to address and/or re-address identified proficiency/performance issues.

g. 3-1-3. c. (1) Technical Training Discussions Responsibilities, establishes the requirement for the facility staff to complete a report to the ATM, describing all technical training that was assigned and completed through the TTD process.

h. 3-1-3. e. Technical Training Discussions Responsibilities, establishes a Controller self-critique and its inclusion into their Technical Training Discussion (TTD). To facilitate and assist employee self-development activities, an employee may request and receive a tape of his/her own session. A self-critique, if discussed with the employee's supervisor, may be included in the employee's technical training discussion.

i. 3-1-4. **b.** Technical Training Discussions Responsibilities, adds the requirement for the employee to sign for receipt of the discussion. It should be noted that the employee's signature does not constitute agreement with the contents of the discussion, only that they have received a copy and a verbal briefing on its contents. Additionally, it adds the requirement to include previous Operational Errors (OE), Operational Deviations (OD), Quality Assurance Reviews (QAR), regional/national OE/OD trends, and facility evaluations.

j. 4-1-1. Air Traffic Incidents Definitions, adds specific definitions of air traffic incidents that were incorporated from FAA Order 8020.11.

k. 4-1-2. General Handling Procedures, adds the requirement to log all air traffic incidents as a QAR on FAA Form 7230-4, Daily Record of Facility Operation.

l. 4-1-2. **b.** (5) (b) Air Traffic Incidents General Handling Procedures, redefines the employee interview (formerly consult) and documentation of the interview.

m. 4-1-3. Quality Assurance Review outlines the QAR process as a means for facilities to identify and correct system deficiencies (not just employee deficiencies) in a timely manner.

n. 4-1-3. **a.** (4) Quality Assurance Review, adds Operational Error Detection Program (OEDP) alert to the QAR process. Existing standalone OEDP logs may be utilized in lieu of entries into the facility operational log (FAA Form 7230-4). This addition simply formalizes the current OEDP process on a national level. As with any investigation, the Air Traffic Manager shall ensure the investigation is conducted in sufficient depth to assess the system performance with reasonable accuracy.

o. 4-1-3. **d.** Quality Assurance Review, re-emphasizes the need to conduct an investigation in sufficient detail as to accurately portray the incident and take appropriate corrective action.

p. 4-1-3. **k.** Quality Assurance Review, adds the requirement for a 45 day retention of all supporting documentation on all suspected losses of separation.

q. 4-1-4. **c.** and **d.** Emergencies, redefines the requirement to immediately notify AAT-200 on all significant emergencies and provide a preliminary report within 3 hours.

r. 4-1-5. Flight Assists, redefines the procedures for the handling of FAA Form 7230-6, Flight Assist Report and outlines the Regional and National Outstanding Flight Assist Award.

s. 4-1-7. Spill Outs, redefines the information needed on all spill outs.

t. 4-1-8. **a.** (3) Airspace Intrusions, adds the requirement of tracking and identifying aircraft that enter Special Use Airspace (SUA).

u. 4-1-9. Invalid Mode C Reporting, allows for the electronic distribution of invalid Mode C reporting.

v. 5-1-1. Air Traffic Operational Error and Deviations Investigations and Reporting, definitions are added to include technical violations, the Operational Error/Operational Deviation Steering Committee, controlled event, uncontrolled event, severity index, and operational error casual factors.

w. 5-1-2. Air Traffic Operational Errors and Deviations Investigations and Reporting, Suspected Event, redefines Air Traffic Policy that any employee who is aware of any occurrence that may be an operational error, operational deviation, or air traffic incident (as defined in paragraph 4-1-1, Definitions) immediately notify the appropriate management official.

x. 5-1-3. Initial Investigations, outlines the intent and process the Investigator-in-Charge should follow with a preliminary investigation. Additionally, it stipulates the need for a timely interview and a written statement from all involved employees and the initial return to duty process under the conformance classification process (See Chapter 6). Keep in mind; if during the preliminary investigation a loss of separation can be attributed to ATC, then a preliminary report should be completed. If both ATC and the Flight Crew of an aircraft are contributory, then both reports should be completed.

y. 5-1-4. Multiple Losses of Separation During a Single Event, the return to duty process will be based on the higher severity event when multiple errors occur and the return to duty plans will be combined.

z. 5-1-5. Investigative Process, redefines the guidelines to help assure a comprehensive and accurate investigation is completed.

aa. 5-1-7. Reclassification, reinforces the ATD responsibility to validate each reclassification request individually and, if warranted, coordinate a reclassification with AAT-200.

bb. 5-1-8. Performance Based Actions, performance management is a daily task. It is incumbent upon every one to identify and address their individual proficiency. Additionally:

(1) Decertification shall not be based solely on the number of or involvement in an OE, but rather on the employees' overall performance history.

(2) The revocation or suspension of control tower operator certificate and facility ratings shall not be used for addressing performance deficiencies.

(3) No employee will be decertified or required to complete remedial training for any operational error(s) classified as low conformance or any operational deviation.

cc. 5-1-9. Return to Operational Duty,

(1) All employees found to be primary/contributory to a low conformance error shall be returned to operational duty as soon as the preliminary investigation is completed. No skill check or follow-up skill check shall be completed. Skill Enhancement training may only be assigned if the event was classified as uncontrolled.

(2) All employees found to be primary/contributory to a moderate or high conformance, as well as all surface, MVA/obstruction, oceanic/non-radar errors *or* at a facility where radar data is not available and where less than 80% of the separation standard was maintained, shall not be returned to operational duty until the provisions of paragraph 5-1-9, Return to Operational Duty are completed. Skill enhancement training or decertification and remedial training may be administered if the employees' documented performance history warrants such action.

dd. 5-1-12. Skill Enhancement Training, is designed to increase the proficiency of a specialist in a skill or task on a position on which the specialist is certified. Based on the circumstances unique to a specific error, skill enhancement training need not always be accomplished prior to an employee continuing operational duties. Skill enhancement training shall be based upon the factors identified during the investigation.

ee. 5-1-15. a. (3) Documentation Retention, all supporting documentation, including the original NTAP or CDR plot shall be retained in approved electronic media, as well as all documentation, i.e. the supervisor's return to duty plan, performance skill checks and conformance chart.

ff. 5-1-15. b. Documentation Retention, preliminary and final OE reports that are classified as low conformance and/or OD reports, while retained for 2 1/2 years, shall be sanitized after 12 months so that any information which could lead to the identification of an employee either primary or contributory to the OE/OD, has been removed.

gg. 5-1-15. c. Documentation Retention, all references to a specific OE/OD shall be removed from the employees' FAA Form 3120-4 and returned to the employee 2 1/2 years after the incident. All references to a specific OE classified as a low conformance and/or OD shall be removed from the employees' FAA Form 3120-4 and returned to the employee 12 months after the incident.

hh. 5-1-16. b. (6) Headquarters and Air Traffic Division Roles and Responsibility, changes the requirement to; All ATDs shall establish a follow-up mechanism to determine if corrective actions contained in FAA Forms 7210-3 are effective and are accomplished in a timely manner. All corrective actions shall specify a completion deadline.

ii. 6-1-1. Severity Index, as recommended by U.S. Department of Transportation, Office of Inspector General, we have developed a method to determine conformance, or collision hazard, for operational errors that occur in flight. In addition, the Memorandum of Understanding (MOU) between the National Air Traffic Controllers Association (NATCA) and the Federal Aviation Administration (FAA), dated January 17, 2001, stipulated that an operational error classification system be developed and implemented no later than April 30, 2001. A classification model was developed as a result of studying numerous operational errors throughout the nation. The model selected is based upon a total of 100 points made up of several factors including vertical and horizontal separation distances, flight paths and cumulative closure rates, as well as the level of air traffic control involvement. A validation and testing period was completed to ensure that the model accurately captured each airborne event. This classification system was put into full implementation on April 1, 2001.

(1) The model for classification of each airborne OE that occurs in domestic airspace includes components that are allotted point values corresponding with their relative significance during the event. To achieve an accurate determination, a radar playback, with voice, of each airborne OE should be prepared so each event can be viewed repeatedly, if necessary. It is important that OE's be assessed in a timely manner so field managers are able to make informed operational and personnel decisions. For these reasons, compliance with the following procedures is required. If any problems arise which make compliance with these procedures unlikely, coordination with AAT-200 is required.

(2) Each applicable OE shall be analyzed and assessed by AAT-200 personnel and a determination made as to the conformance of the event. Each OE that occurs in domestic airspace, under radar control, will be rated and categorized into one of three levels of conformance. Most final determinations will be completed within 10 business days of the initial OE call-in to AAT-200.

(3) After carefully analyzing each event, point values will be assessed for several operational factors and once totaled this cumulative number will fall into a range that defines each category.

jj. 7-1-1. En-route Operational Error Detection Program (OEDP), outlines the en-route procedures to be followed when a facility receives an OEDP alert.

kk. 7-1-2. OEDP Audit, outlines the requirement for en-route facilities to develop a process to audit their internal OEDP alert validation process.

ll. Appendix 1, Radar Data Processing; NTAP, SATORI, CDR plots, Radar Audio Playback Terminal Operations Recording (RAPTOR), Radar View Point, MSDT, ATC Plot and other reduction or playback tools are available to assist in investigations. As technological advances are made, the ATC system must adjust to these changes and ensure that radar reduction tools are used correctly and consistently throughout the system in order to provide the most accurate recreation possible.

(1) NTAP, SATORI, CDR data, and other reduction or playback tools shall not be arbitrarily used as the primary initiating source (triggering event) for reporting an OE/OD or commencing an investigation. However, these reduction/playback tools may be used in the investigation of suspected incidents to determine the amount of separation that existed or the position of aircraft. Additionally, these tools may be used for individual employee performance review/improvement and/or system/facility evaluation. When this is accomplished and a loss of separation is discovered, that error shall be reported, but attributed to the facility as a facility error. Skill enhancement training may be assigned to those employees' determined to be contributory to these events. However, decertification shall not be imposed.

(2) SATORI, RAPTOR or other playback tool may be used in the investigation of a QAR, suspected OE/OD, pilot deviation, NMAC, TCAS event, miscellaneous incident, or accident; to determine the relative flight tracks, speeds, headings, location and separation of the involved aircraft. These tools may be used to determine controller and/or pilot performance and/or involvement in the incident, as well the aircrafts closest proximity.

mm. Appendix 1-2, en-route LST 5 measurements data are more precise than NTAP measurements. Whenever possible a LST 5 shall be used to determine closest proximity.

nn. Appendix 1-3, Continuous Data Recording (CDR), defines terminal radar data classes.

oo. Appendix 1-4, defines CDR extraction and voice recording procedures.

pp. Appendix 2 and 3, adds the new preliminary operational error/deviation instructions and report.

qq. Appendix 3 and 4, FAA Form 7210-3, Final Operational Error/Deviation Report, changes include,

addition of the conformance, elimination of the employees name and addition of employees last six digits of their social security number for identification purposes.

rr. Appendix 9, FAPM 2635 was recently replaced with the FAA Human Resource Policy Manual. The interview statement has changed and stipulates that it is the duty of every employee to give to any supervisor or official conducting an official investigation or inquiry, all information and testimony about all matters inquired of, arising under the law, rules, and regulations administered by the FAA. Additionally, it is the responsibility of every employee to make themselves available as directed so that such an interview may be accomplished (as outlined in FAA Human Resource Policy Manual, ER 4.1 Standards of Conduct). As appropriate the interview statement shall be read or given to an employee before conducting an interview.

ss. Appendix 10, General Reporting Procedures, adds a quick reference chart for the reporting of all air traffic incidents.

tt. Appendix 11, Air Traffic Incident Handling Procedures, adds a generalized quick reference page for specific air traffic incidents and their notification requirements.

uu. Appendix 12, Data Retention adds a quick reference chart for document retention requirements.

1-1-5. EFFECTIVE DATE

This Order is effective **August 15, 2002**.

1-1-6. RELATED PUBLICATIONS

The following publications are the primary references to be used in coordination with provisions of this order:

a. FAA Order 3120.4, Air Traffic Technical Training.

b. FAA Order 7010.1, Air Traffic Evaluations.

c. FAA Order 7110.10, Flight Services.

d. FAA Order 7110.65, Air Traffic Control.

e. FAA Order 7210.3, Facility Operation and Administration.

f. FAA Order 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting.

1-1-7. USE OF TERMS

First-Level Supervisor shall include the Air Traffic Manager (ATM) wherever the ATM also performs such duties.

First-Level Supervisor, ATM, etc., shall include their official designees, except where specifically noted, for the purpose of accomplishing roles and responsibilities.

Establish, Designate, Identify, Develop, Waive, Authorize etc., shall be understood to require such actions to be specific and in writing.

1-1-8. SCOPE

Quality assurance is a dynamic process used to continually improve the air traffic system. Although we will continue to measure the quality of our service by some historical methods, such as the number of operational errors, delays, employee and customer feedback, we must also recognize factors that cannot as readily be measured. Our willingness to function as a team, our training, and the actions taken to support the goal of zero operational errors all factor into quality assurance. The success of our quality assurance efforts is dependent on the recognition by the entire air traffic workforce that all of us, independently and collectively, must strive to provide the best service possible. We are all accountable for the quality of that service.

CHAPTER 2. QUALITY ASSURANCE (QA) PROGRAMS

2-1-1. OVERVIEW

A critical component of any effective quality assurance program is problem prevention. This chapter provides a list of proactive quality assurance strategies. While it is by no means all-inclusive, it does provide some ideas that may be developed in individual quality assurance programs.

2-1-2. RESPONSIBILITIES

a. Manager, Air Traffic Evaluations and Investigations Staff, AAT-20, shall:

(1) Provide guidance and assistance to Regional Air Traffic Divisions to develop their QA Programs.

(2) Ensure all Air Traffic QA Programs are evaluated through the national evaluation process.

(3) Maintain, on file, each regional QA program, and provide an annual assessment of those programs to the Director of Air Traffic, AAT-1.

(4) Conduct Investigative Reviews of Air Traffic Services (IRATS) for facilities with high or increasing numbers of operational errors or incidents.

(5) With assistance from Regional Quality Assurance Staffs, identify and recognize air traffic facilities that:

(a) Have achieved 1,000,000 error free operations. Facilities achieving the significant milestone of 1,000,000 error free operations shall be presented with a Certificate from the Director of Air Traffic signifying their inclusion in the "None in a Million" Club.

(b) Have achieved significant reductions in OE/OD rates.

b. Regional Air Traffic Division (ATD) Managers shall:

(1) Develop a Regional QA Program.

(2) Identify which facilities within the region shall be required to develop a Facility QA Program.

(3) Provide a copy of all Regional and Facility Quality Assurance Orders and Operational Error/Operational Deviation (OE/OD) prevention plans to AAT-20.

(4) Annually review existing regional quality assurance orders and programs and, as necessary, develop new quality assurance orders or revise existing

orders that address OE/OD prevention. In doing so, each ATD shall take into account past deficiencies identified by AAT-20. In addition, each ATD shall ensure that all facilities have an OE/OD prevention plan written, approved, and in effect. Each ATD shall also ensure that existing or revised QA orders are in compliance with this order.

Note:

Individual facility OE/OD prevention plans may be combined into a single HUB document.

(5) Ensure a "Back to Basics" approach is included in each OE/OD prevention plan. The objective of a back to basics approach is to reduce and prevent OE/ODs by emphasizing proper use of the basics of air traffic control. As a minimum, all facilities shall continually emphasize the use of standard phraseology, the need to ensure pilot read-backs are complete and correct, and the use of position relief checklists during position relief briefings. This back to basics approach can be implemented using a variety of methods such as weekly team briefings, staff meetings, increased dialog with the workforce during performance related discussions and by posting examples monthly on facility or QA bulletin boards.

(6) Ensure that facility OE/OD prevention plans include items pertinent to a particular facility. In developing OE/OD prevention plans, Air Traffic Managers (ATM) shall consider past deficiencies identified by AAT-20.

(7) Ensure that regional/facility OE/OD prevention plans provide the means for identification of non-compliance with national, regional, and local facility directives or standards; identify the cause(s) of the non-compliance; immediately rectify occurrences of non-compliance; and eliminate future non-compliance.

(8) Provide trend analysis, statistical data, recommendations and other pertinent information to assist field facilities with their prevention efforts. Regional Quality Assurance Staffs shall also provide assistance and support to all terminal facilities to ensure that all national surface error prevention strategies have been implemented as required.

(9) Establish methods for early identification of facility operational trends in order to raise facility operational awareness. OE/OD rates per 100,000 operations will be tracked and distributed to heighten awareness of each facility's OE/OD trends.

(10) Ensure that towers include a comprehensive plan to prevent surface incidents, if one is not already contained in a separate facility Runway Incursion Prevention Plan.

c. Hub Managers/ATM's shall:

(1) Maintain a level of awareness and involvement in their facility's operations/programs so as to ensure their maximum quality and efficiency.

(2) Develop a Facility QA Program as directed by the ATD or Hub manager.

(3) Identify which facilities within their Hub shall be required to develop a Facility QA Program.

2-1-3. PROGRAM CONTENT

QA programs shall establish methods to identify and correct deficiencies and recognize successes in, as a minimum, the following four areas:

a. Operational Error and Operational Deviation (OE/OD) Prevention:

(1) From the following list, include, as a minimum, three actions to preclude OE/OD's from occurring:

(a) Hearback/Readback programs.

(b) Surface error prevention programs.

(c) Incentive/recognition programs.

(d) Employee of the Month/Quarter programs.

(e) List of good operating practices.

(f) Tape talks/Phraseology Improvement Programs.

(g) Supplemental, refresher or skill enhancement training and/or simulation training.

(h) Personal accounts of lessons learned.

(i) Periodic QA briefings in the facility covering trends, customer input, evaluations, etc.

(j) Aggressive resolution of problems identified by the Unsatisfactory Condition Report (UCR) program.

(k) Review of Monitor Alert Parameters (MAP).

(l) Incorporate previous OE scenarios into the training program.

(2) Regional QA Programs shall include procedures for the regular, periodic review of facilities'

OE/OD trends. These procedures shall provide for appropriate investigation and reporting of observed trends.

b. Teamwork. From the following list, include as a minimum, two items that will instill teamwork within the air traffic control specialist (ATCS) workforce, administrative workforce, and between facilities, outside entities, etc.:

(1) Air Traffic Teamwork Enhancement (ATTE) training, internal and external teams.

(2) Teamwork incentive/recognition programs.

(3) Roles of different positions/jobs (facility-wide cross training).

(4) Supervisor/CIC skills course.

(5) Team meetings.

(6) Clearly communicated expectations.

c. Communications. From the following list, include as a minimum, four items to improve communications among all employees and create an atmosphere conducive to the sharing of information:

(1) Electronic Bulletin Board System or Internet/Intranet access to data.

(2) National Database - containing facility, regional and national QA data.

(a) <http://aat20.faa.gov/>

(3) Newsletter(s) - electronic editions where possible.

(4) QA seminars and conferences.

(5) System wide QA TELCONs.

(6) Team briefings on trends and issues.

(7) All hands meetings.

(8) SUPCOM

(9) Industry reports (e.g. National Transportation Safety Board (NTSB) reports, Aviation Safety Reporting System (ASRS), Air Line Pilots Association (ALPA), and Aircraft Owners and Pilots Association (AOPA) newsletters).

d. Customer Service/Feedback. From the following list, include as a minimum, four items to solicit employee and customer feedback (internal/external customers) regarding the quality of service provided by the facility and the organization's impact on other organizations, users, and individuals:

- (1) Operation Raincheck/Operation Takeoff.
- (2) Surveys of internal and external customers.
- (3) Interaction with other organizations - NTSB, Flight Standards District Office (FSDO), Department of Defense (DOD).

- (4) Employee evaluation of shift performance.
- (5) All hands meetings.
- (6) SUPCOM.
- (7) Familiarization flights.
- (8) Bargaining unit representatives.
- (9) Contacts with user organizations (e.g. Fixed Base Operators, Flight Schools).
- (10) Pilot safety seminars and airport management workgroups.

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.

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.

CHAPTER 4. AIR TRAFFIC INCIDENTS

4-1-1. DEFINITIONS

There are several types of incidents that adversely affect the capabilities of air traffic control (ATC) facilities to provide safe, orderly, and expeditious movement of air traffic:

a. The following incidents are defined and FAA Order 8020.11 provides for their reporting procedures:

(1) Aircraft Accident – an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and until such time as all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.

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

(a) Workload permitting, notify any member of a flight-crew receiving air traffic control services who expresses concern about the proximity of another aircraft to contact facility representatives. Use the following phraseology, “(aircraft identification) advise you contact (facility) at (telephone number)”.

(b) Upon receiving any telephone call from a flight crewmember that expresses concern about the proximity of another aircraft, the supervisor/controller-in-charge shall ask the caller if he/she desires to file a formal near midair collision report. All such calls shall be taken on a recorded line, if available.

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

(a) When it appears that the actions of a pilot constitute a possible pilot deviation, notify the pilot, workload permitting, using the following phraseology “(aircraft identification) possible pilot deviation, advise you contact (facility) at (telephone number)”.

NOTE:

These classifications include TCAS RA, spill outs and controlled airspace intrusions that result in a loss of separation.

(4) Vehicle and Pedestrian Deviation – any entry or movement on the airport movement area by a vehicle operator or pedestrian that has not been authorized by air

traffic control (includes surface incidents involving aircraft operated by non-pilots, such as mechanics).

b. The following definitions are for incidents whose reporting procedures are provided for by this chapter:

(1) Emergency – a distress or urgent situation that requires special handling of an aircraft by air traffic (AT); includes giving priority that may result in delays to other aircraft.

(2) Flight Assist - when in-flight assistance is provided to an aircraft in a potentially dangerous situation.

(3) Military Facility Deviation - an operational error or operational deviation that involves delegated AT responsibilities performed by a military facility, including all Authorization for Interceptor Operations (AFIO) deviations.

NOTE:

This classification does not include instances when approved separation minima are used between military aircraft that are less than those used by the FAA.

(4) Spill Out - an excursion of an IFR or VFR military aircraft, or a civil aircraft contracted to the military, including remotely operated aircraft, from the exterior boundary of Special Use Airspace (SUA) allocated to military using agencies into other controlled airspace without coordination or prior approval. SUA includes Altitude Reservations (ALTRV); ATC Assigned Airspace (ATCAA); Military Operations Areas (MOA); Military Training Routes (MTR); Prohibited, Restricted, and Warning Areas.

(5) Surface Incident (SI) - any event where unauthorized or unapproved movement occurs within the movement area associated with the operation of an aircraft that affects or could affect the safety of flight.

NOTE:

Surface incidents result from Pilot Deviations, Operational Errors, Vehicle or Pedestrian Deviations, or Operational Deviations.

(6) Runway Incursion - any occurrence at an airport involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in a loss of separation with an aircraft. The occurrence may involve a pilot taking off, intending to take off, landing, or intending to land.

NOTE:

Runway incursions result from one of three types of airport surface incidents: pilot deviations, operational errors, and vehicle or pedestrian deviations.

c. Operational Errors and Operational Deviations (OE/OD) are defined and their reporting procedures provided for in Chapter 5.

4-1-2. GENERAL HANDLING PROCEDURES

In addition to any procedures provided for by other FAA orders and other sections of this document, the following procedures shall be applied to all air traffic incidents addressed in paragraph 4-1-1, Definitions:

a. **Compiling Information.** The facility first learning of or primarily involved in an incident shall obtain and complete a summary of the pertinent data immediately upon learning of the incident, or as soon thereafter as duties permit, to meet the reporting time requirements for the particular incident. A reference to this incident shall be logged on FAA Form 7230-4, Daily Record of Facility Operation as a Quality Assurance Review (QAR), as outlined in paragraph 4-1-3, Quality Assurance Review.

b. **Incidents Involving More Than One Facility.**

(1) The ATM's of the involved facilities shall cooperate in the investigation and the preparation of the final report.

(2) If circumstances prevent collaboration, the facility most involved shall prepare the final report and provide a copy to the other.

(3) Do not submit individual reports on the same incident.

(4) When facility or regional boundaries overlap, send a copy of the final report to each ATD involved.

(5) When an incident occurs and it is suspected that other facilities may have provided services (flight plan, pilot briefing, radio contact, etc.), transmit a priority FF message on Service B to all facilities as follows (text only): "Advise whether any services provided (aircraft identification) today (or specify date). Negative replies requested."

(a) Limit the reply to the message reference, the aircraft identification, the services provided, and the time and the date the records will be forwarded.

EXAMPLE-

(text only): Reference message from your office (RUMES) (date-time) N1235M. Pilot briefed 1410, VFR flight plan filed. Records will be mailed (date).

(b) After interviewing the employee involved, if necessary, prepare a narrative summary of

the interview and attach facsimile copies of the pertinent records.

NOTE:

FSS's are responsible for the immediate delivery of the request message (either by telephone or hand delivery) to addressees in their flight planning area.

c. **Telegraphic Notification.** Any incident that warrants telegraphic notification will require adherence to the following procedures:

(1) The message shall be a numbered operational priority message.

(2) No part of the message shall exceed twenty lines, as that will cause an incomplete message to be relayed.

(3) The originating facility shall obtain and record an acknowledgment from each addressee.

d. **Post-Incident Coordination.** As part of the initial process for handling accidents or serious incidents, it is imperative that facilities remain aware of the potential personal impact to involved individuals and to any special needs or requests that may develop as a result. To that end, the ATD must ensure that appropriate regional counterparts are kept abreast of developing information so that they may participate in subsequent decisions affecting facility personnel.

(1) ATM's shall, following a major aircraft accident or serious incident; contact the regional ATD and provide an assessment of the personal affect on facility personnel. Additionally, any proposed personnel action that results from the incident shall be coordinated with the appropriate regional offices.

(2) ATD Managers shall ensure that subsequent coordination is accomplished as necessary with the Aviation Medical Division, Human Resource Management Division, as well as the Assistant Chief Counsel. Employee Assistance Program Coordinators or Contractors should also be alerted to the potential need of their services. Additionally, any proposed personnel action that results from the incident shall be coordinated with AAT-20 before initiation.

e. **Coordination with Regional Counsel.** Incidents resulting in personal injury or property damage may result in a lawsuit. In such event, the files and records relating to the investigation and any actions taken may be subject to disclosure to the attorneys for the litigants and produced in court. Therefore, coordinate follow-up actions with the Regional Counsel. The purpose of this action is not to minimize or restrict actions but to provide assurance that the findings upon which the action is taken contain no misleading language resulting in possible liability to the agency or the individual.

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

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:

1. Annual National and Regional Outstanding Flight Assist Awards recognize employees whose actions contribute significantly to the safety of aviation. The selection of an outstanding flight assist will be judged on the basis of operational efficiency. Factors to be considered are the method used, expediency of the assist, circumstances surrounding the flight assist, analytical decision exhibited, timely action, the all-out effort demonstrated, and any other special factors that are appropriate.

2. Each region may submit three nominations (one per option: en-route, terminal and flight service).

3. Each nomination is expected to include a narrative statement describing the details of the flight assist, a copy of FAA Form 7230-6, Flight Assist Report, a certified voice recording of the flight assist, and any other documentation relative to the occurrence.

4. Nominations for the preceding year must be received by the Program Director of Air Traffic Resource Management, ATX-1, by February 15.

NOTE:

An employee is limited to one monetary award for a single contribution. Therefore, it is recommended that regional or facility awards are not made until it is determined that the occurrence does not warrant a national award.

4-1-6. MILITARY FACILITY DEVIATIONS

a. The AT facility or representative (ATREP, RADLO, etc.) noting or receiving information about a military facility deviation shall report the occurrence immediately to the respective ATD.

(1) The report number shall be composed of the letter "M", followed by the last digit of the calendar year, a slant line, and the sequential number of military facility deviations forwarded by the reporting FAA office. Use a new sequence of numbers beginning January 1 of each year.

(2) Report the deviation in narrative form by memorandum within 10 administrative days of the occurrence. Prepare the report as follows:

(a) Include a chronological summary of the incident. Details shall be as complete as security considerations and data availability will permit.

(b) Include a brief statement of the probable cause or causes if the available data is sufficient to make these conclusions.

(c) Include recommendations, as appropriate, to preclude a recurrence of the event.

b. Distribute the report as follows:

(1) Original to the ATD.

(2) Facility's files.

(3) AAT-20.

(4) Military Distribution:

(a) Designated Regional Office Military representative.

(b) Send one copy to the facility's major command (MAJCOM/MACOM). Obtain MAJCOM/MACOM information from the facility or the appropriate regional military representative.

1. Air Force
HQ AFFSA/XAES
1535 Command Drive
Suite D-309
Andrews AFB, MD 20762 –7002

2. Army
US Army Aeronautical Services Agency
ATTN: Chief, Airspace Support Division
9325 Gunston Road
Bldg 1466, Suite N-319
Fort Belvoir, VA 22060-5582

3. Navy/Marine
Chief, Air Traffic Branch
CNO N885F
Navy Department
Washington, DC 20350-2000

4-1-7. SPILL OUTS

Spill out reporting is a non-punitive program to identify design and/or procedural problems with special use airspace. Facilities shall report all spills outs within three (3) hours of the incident by forwarding the following information electronically (i.e. facsimile, email with attachment) to the Safety/Quality Assurance division, through the Service Area, ROC, and the WOC, with an information copy to the Systems Operations Support Center (SOSC), AJR-215 at 202.267.9208 or email 9-ATOR-HQ-SOSC@faa.gov. Electronic submissions should be confirmed via telephone or return-receipt.

a. If the spill out resulted in a loss of separation or report of a NMAC with another aircraft outside the SUA, report the incident as a pilot deviation and forward the following information to ATO Safety, Safety Assurance, via the Washington Operations Center (WOC) within 3 hours of the incident:

(1) Reporting facility.

(2) Date and time (UTC) of the incident.

- (3) Aircraft identification.
- (4) Type, number, and equipment suffix of aircraft.
- (5) Location (VOR with DME Fix).
- (6) Altitude of incident.
- (7) Type of flight plan, i.e. IFR or VFR.
- (8) Branch of Military service of aircraft.
- (9) Special Use Airspace Name.
- (10) Special Use Airspace Type.
- (11) Using Agency Name.
- (12) Type of control of using agency (ATC or MRU).
- (13) Controlling facility.
- (14) Was there a loss of separation?
 - (a) Call sign/Tail number.
 - (b) Type aircraft.
 - (c) Closest proximity.
- (15) Summary of events.

4-1-8. AIRSPACE INTRUSIONS

Intrusions are reported as pilot deviations in accordance with FAA Order 8020.11.

a. ATM's (excluding AFSS and FSS managers) shall provide guidance in facility directives for the tracking and identification of aircraft that enter:

- (1) Class A or B airspace without authorization.
- (2) Class C or D airspace without establishing communications with air traffic control (ATC).
- (3) Special Use Airspace, e.g. Temporary Flight Restriction (TFR), prohibited areas, and other restricted airspace without authorization.

NOTE:

The Chief Counsel's office has instructed the Regional Counsel offices to include the ATD on their distribution lists for notification following final enforcement action on controlled area intrusions.

b. When enforcement action is taken as a result of a controlled area intrusion, the ATD shall be responsible for ensuring notification through the facility ATM to the

reporting controller of the outcome of the enforcement action.

4-1-9. INVALID MODE C REPORTING

a. In order to track and report aircraft with transponders equipped with invalid Mode C readouts whose pilots have been advised to stop the altitude squawk, facility managers shall provide guidance in a facility directive(s) to ensure that a designated facility officer compiles a weekly list of invalid Mode C reports and forwards this report to the Regional Flight Standards Division. This report may be forwarded electronically with the concurrence of the Regional Flight Standards Division and shall include:

- (1) Aircraft registration number/call sign.
- (2) UTC date and UTC time of the incident.
- (3) Assigned altitude and Mode C reported altitude.
- (4) Facility 3-character identifier and facility type.

NOTE: A negative report is not required.

4-1-10. SURFACE INCIDENTS AND RUNWAY INCURSIONS

a. For significant surface incidents and runway incursions (e.g., involving air carriers, air taxis, or prominent persons), in addition to routine reporting procedures, notify the ATD, regional airports division, AAT-20, and the WOC through the ROC by telephone.

b. Notify airport management of all surface incidents, regardless of type, by the close of business the next administrative day. If previously reported incidents are determined to be runway incursions, inform the airport operator of the status change.

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

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 ATQA 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 conformance is not calculated 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 likely 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 may 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*

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.

(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 diskette are suitable media. Include all 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 &

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 and digital recording of voice 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.

- **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.

(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 be retained in the facility for 2 ½ 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 post-event. This method has proven to be 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

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 AT SAP 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.

5-1-11. 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.

(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 applicable), and develop recommendations, 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 of 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

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.

I 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.

CHAPTER 6. CONFORMANCE CATEGORIES

6-1-1. DEFINITIONS

a. Category A OE. A loss of airborne separation where the separation conformance number is less than 34.

b. Category B OE. A loss of airborne separation where the separation conformance number is 34 or more, but less than 75.

c. Category C OE. A loss of airborne separation where the separation conformance number is 75 or more, but the horizontal and vertical separation retained is less than 90 percent of the required separation.

d. Wake Event. An OE where the prescribed wake turbulence separation minima is violated. Wake incidents are categorized for conformance as follows:

(1) Category A Wake Event - a loss of airborne separation where the lateral separation retained is less than 70 percent.

(2) Category B Wake Event - a loss of airborne separation where the lateral separation retained is equal to or greater than 70 or more percent, but not including 85 percent.

(3) Category C Wake Event - a loss of airborne separation where the lateral separation retained is equal to or greater than 85 percent, but less than 100 percent.

NOTE-

There is no PE category for wake incidents. An electronic calculator is available (see Appendix 14, Figure 14-1) to calculate the OE conformance category. If unable to access the calculator, tables are available (see Appendix 15 page 5) to determine the OE conformance category.

CHAPTER 7. OPERATIONAL ERROR DETECTION PROGRAM (OEDP)

7-1-1. EN-ROUTE OPERATIONAL ERROR DETECTION PROGRAM (OEDP)

a. When the OEDP Alert activates or you are advised by another facility that they have received an OEDP alert on one or more aircraft that are under your facility's jurisdictional control, take the following actions:

(1) Record the alert on FAA Form 7230-4, Daily Record of Facility Operation, or a locally developed OEDP form.

NOTE:

Facilities may establish a local form and procedures for recording, disseminating and documenting the resolution.

(2) Review the alert and determine the validity of the alert.

(3) If the alert is valid, proceed with the investigation and reporting procedures that are listed in paragraph 5-1-3, Initial Investigations. Ensure that the OEDP form contains the following information:

(a) "OEDP Alert" with the four digit alert number.

(b) Reason for the alert.

(c) Operating initials.

(4) If the alert is invalidated, ensure that the OEDP form contains the following information:

(a) "OEDP Alert" with the four digit alert number.

(b) Resolution of the alert.

(c) Operating initials.

(5) For resolution of OEDP Alerts make the following entry onto FAA Form 7230-4, Daily Record of Facility Operation, or a locally developed OEDP form.

"Q" ENTRY

TIME OF NOTIFICATION

"OEDP Alert"

Facility reporting OEDP

Aircraft call signs

Resolution to alert

Operating initials

EXAMPLE:

"Q" 1700 OEDP Alert ZAU, AAL33, UAL44, Target Swap, HH

7-1-2. OEDP AUDIT

a. All en-route facilities shall establish a review process to validate/audit OEDP alerts. Consider the following data when auditing OEDP alerts:

(1) Ensure that all numbers are sequential.

(2) Ensure that all OEDP alerts have a valid explanation.

(3) Conduct weekly checks; e.g., eight visual climbs (if available) and five non-visual/VFR events.

(4) Any questionable alerts, shall be validated by any one of the below methods:

(a) Pilot reports will be verified by voice tape.

(b) Target swap - check flight plan readout to determine if aircraft were in possible transition, validate via NTAP/CDR.

(c) FAA Order 7110.65 requirement, validate all with voice and/or NTAP/CDR.

(d) Military Assumes Responsibility for Separating Aircraft (MARSAs), ensure military aircraft where involved.

(e) Visuals/VFR climb, check altitudes. Check for B757 or heavy wake turbulence criteria.

(f) VFR separation, check flight plan readouts and altitudes.

b. Prepare a quarterly report of the findings to the ATM identifying the initiating incident and conclusion of the review.

c. Retain all OEDP forms for 6 months.

CHAPTER 8. TERMINAL/TRACON AUDIT PROCESS FOR OPERATIONAL ERRORS & OPERATIONAL DEVIATIONS

8-1-1. BACKGROUND

The FAA does not have a system that ensures accurate OE/OD reporting at all terminal/TRACON air traffic control facilities. Thus, we are establishing the facility audit process that allows the use of playback tools to identify OE/OD's. This procedure will provide greater assurance that substantially all OE/ODs are being reported.

8-1-2. FACILITY AUDIT PROCESS

The following provides requirements and guidance concerning the facility audit process:

a. Each terminal/TRACON facility will develop, in writing, a method to review a random sample of radar and voice data to assess that OE/ODs are being fully reported. Sampling methods will include periods of high-risk factors (e.g. peak traffic times), alerts from equipment such as, but not limited to, AMASS, ASDE-X, low altitude alerts, conflict alerts, reports from pilots concerning quality of services, TCAS events, and other air traffic incidents that are not identified as OE/ODs. To improve the accuracy of the reporting process, the use of replay capabilities and voice files will be used to conduct random audits of air traffic services. This includes the use of all automation playback tools which are available for review at the facility i.e. AMASS, ASDE-X, RAPTOR, and voice files, etc.

b. Each facility will conduct a monthly audit based on the criteria identified and provided by the Safety Investigation & Evaluation Office.

c. This monthly audit will consist, at a minimum, of two one-hour periods of data.

d. Audits will be considered as a primary source for reporting an OE/OD or initiating an investigation.

e. The results and the associated data of each audit shall be documented and retained at the facility for a period of one year.

f. The facility will forward a quarterly report to their respective Service Center, Safety Assurance Office, for review. The Service Center, Safety Assurance Office, will compile the findings and forward them to the Terminal Safety and Operations Support Office. The Terminal Safety and Operations Support Office will forward these reports to the Safety Investigation & Evaluation Office for validation and oversight.

8-1-3. SAFETY ASSURANCE OFFICE RANDOM AUDIT

a. The Safety Investigation & Evaluation Office will advise selected facilities by the seventh of each month that in lieu of the facility audit process, a Safety Investigation & Evaluation Office random audit will be conducted.

b. This random audit will include all air traffic operations that have replay (radar data and/or voice) capability. Safety Investigation & Evaluation will determine the specific times, dates, and type of operation, etc.

c. Selected facilities will conduct the audit, document their findings, and forward the results to the Safety Investigation & Evaluation Office electronically or by approved overnight delivery within seven business days. The data and findings from this audit shall also be retained at the facility for a period of one year. Safety investigations data and analysis will be retained for a period of two and one half years.

APPENDIX 1. RADAR DATA PROCESSING

1. GENERAL INFORMATION

a. Use of radar data in OE/OD investigation processes remains one of the most accurate methods available to re-create events. Because of the importance placed on radar data in the determination of the facts surrounding incidents, it is imperative that this data be processed and analyzed using clearly defined procedures that eliminate localized interpretations of how best to extract, present, and assess the information.

b. NTAP, SATORI, CDR plots, Radar Audio Playback Terminal Operations Recording (RAPTOR), Radar View Point, MSDT ATC Plot and other reduction or playback tools are available to assist in investigations. As technological advances are made, the ATC system must adjust to these changes and ensure that radar reduction tools are used correctly and consistently throughout the system in order to provide the most accurate recreation possible.

c. NTAP, SATORI, CDR data and other reduction or playback tools will be used in the investigation of suspected incidents to determine the amount of separation that existed or the position of the aircraft. Additionally, these tools may be used for individual employee review/improvement, system/facility investigations, audits or evaluations. When this is accomplished and an OE/OD is discovered, the incident will be reported and processed in accordance with Chapter 8.

d. SATORI, RAPTOR or other playback tool may be used in the investigation of a QAR, suspected OE/OD, pilot deviation, NMAC, TCAS event, miscellaneous incident, or accident; to determine the relative flight tracks, speeds, headings, location and separation of the involved aircraft. **These tools may be used to determine employee and/or pilot performance and/or involvement in the incident, as well the closest proximity.**

2. NATIONAL TRACK ANALYSIS PROGRAM (NTAP)

a. NTAP was originally designed to assist in Search and Rescue missions aimed at locating missing or suspected downed aircraft. This program has inherent limitations when used to measure aircraft separation. Three of the major limitations in using NTAP plots to measure separation distances are the following:

(1) High-speed printer limitations, due to design and physical characteristics of the high-speed printer preclude accurate plotting of NTAP aircraft position symbols.

(2) Multiple radar data processing creates a compound environment of surveillance sites with unsynchronized radar scans, producing aircraft target updates in non-uniform time frames.

(3) Manual measurements and smoothing of flight tracks are subject to human error, creative interpretation, and optical parallax. In addition, target symbol positions being measured may not accurately represent relative aircraft positional information.

b. Because of the above limitations, use of NTAP for measuring aircraft separation values, requires specific guidelines to ensure system credibility. The following procedures shall be used when using NTAP for OE/OD determinations:

(1) NTAP may be used for OE/OD determinations at an en-route facility provided all the following conditions are met:

(a) A plot size of one-inch equals one-mile is used.

(b) For aircraft speeds of less than 250 knots, input times shall be at least 2 minutes before and after the time of the triggering OEDP alert. For speeds above 250 knots use at least 1 minute before and after the alert time.

(c) The following plot keywords are used:

1. PRI (primary targets); or

2. BCN (beacon targets); or

3. LDB (limited data blocks); or

4. SEL (select plots only BCN or LDB associated with particular beacon codes input on the code card); or

NOTE:

SEL is a stand-alone option or can be used as a suboption of BCN to plot aircraft on particular beacon codes.

5. A combination of the above options.

6. LST A (list data), a special plot keyword is used to create separate data listings for each of the four list (LST) options.

(d) 1/5 mile is added to the distance between the printed symbol centers before making a determination. This accommodates the high-speed printer limitations.

(e) If target position jumps have occurred, a smoothed line shall be drawn indicating the most probable flight path of the involved aircraft. That line shall be used for measurement purposes. When determining the most probable flight path, ensure that a maximum number of printed target symbols are used in the smoothing process.

(f) The NTAP plot is used to declare an OE/OD only if the Air Route Traffic Control Center (ARTCC) providing the computer data was responsible for the separation of the aircraft involved.

c. Computer operational error detection software (OEDP) measurements are more precise than NTAP measurements. An error detection alert measurement cannot be invalidated by an NTAP plot measurement by the ARTCC receiving the alert unless at least one target position, used by HOST in the generation of the alert message, is clearly identified as a significant target jump. All original NTAP plots used to invalidate OEDP alerts shall be forwarded to the facility's QA office for review, and shall be retained for 45 days.

d. LST 5 measurements data are more precise than NTAP measurements. When ever possible a LST 5 shall be used to determine closest proximity.

3. CONTINUOUS DATA RECORDING (CDR)

a. When CDR data is used in an OE/OD investigation(s) the Automated Radar Terminal Systems (ARTS) clock shall be verified as accurate. In addition, any plotted depiction of targets derived from CDR data shall be certified as accurate and valid. A statement of such certification shall be added to the plot depiction.

b. For CDR reductions from ARTS systems that calculate aircraft separation distances both from target "A" to "B" and from target "B" to "A", use the larger of the two aircraft separation calculations within the same time stamp.

c. DATA CLASSES

- (1) ARTS IIE & IIIE:

(a) TA – Tracking Associated Data – Data Block, flight plan information that has been linked between a tracked target (transponder secondary code) and the Flight Data System, NAS or HOST.

(b) TU – Tracking Unassociated Data – all other tracked secondary and primary targets with limited data blocks that cannot be correlated with the Flight Data System, NAS or HOST.

(c) RB- Radar Reinforced Beacon Target Reports – All primary and secondary radar data available on any individual track.

(d) BT – Beacon Target Reports – All secondary radar data.

(e) RT – Radar Target Reports – All primary radar targets.

(f) CR - provide Aircraft Type, Scratch Pad, Special Designators - VFR, ENROUTE, TCAS, HEAVY, Radio Failure, Hi-Jack, Emergency, Transponder Indent, Conflict Alert Indicator, MSAW Indicator, and Leader Direction for every time the track is updated on the screen.

(2) ARTS IIIA:

(a) TD – Tracking Data – Tracking Associated Data – Data Block, flight plan information that has been linked between a tracked target (transponder secondary code) and the Flight Data System, NAS or HOST and Tracking Unassociated Data – all other tracked secondary and primary targets with limited data blocks that cannot be correlated with the Flight Data System, NAS or HOST.

(b) TG – Target Reports - Radar Reinforced Beacon Target Reports – All primary and secondary radar data available on any individual track. Beacon Target Reports – All secondary radar data. Radar Target Reports – All primary radar targets.

4. CDR EXTRACTION and/or VOICE RECORDING REQUEST for RAPTOR CDR Playback

a. When a CDR extraction and/or voice recording is requested, please use the following guidelines below. It is imperative that extractions are made exactly as listed below. Please do not deviate from these specifications unless instructed/requested to do so by AAT-200.

b. CDR EXTRACTIONS do not use any filters except for time, Data Class and subsystem (radar sensor) unless specifically requested.

- (1) Extract the data, using “CDR-Editor” or similar extraction tool as follows:
 - (2) Data classes for ARTS IIE and IIIE systems –TA, TU, TG and CR
 - (3) Data classes for ARTS IIIA systems –TD and TG.
 - (4) Save as a single file in ASCII format ending in **.TXT**.
 - (5) For multiple sensor systems, identify the sensor number in use or filter all but primary the sensor in use.
 - (6) Please identify and/or provide an electronic copy of the radar map most likely in use during the event.

c. VOICE RECORDINGS

- (1) If a time channel is not included or a digital voice file is created without a time reference, include the exact time (hh:mm:ss UTC) of the first radio transmission that can be correlated with radar display information.
- (2) When voice recordings are also requested, please indicate the time difference, if any, between the recorder clock and the ARTS clock and ensure you provide the start times and ensure both the time channel and voice is audible.

**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?

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

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 (AXX-505), Washington Operations Center (WOC), and Headquarters Safety Investigator (AAT-200) receiving the report.

APPENDIX 3. EXAMPLE OF PRELIMINARY OPERATIONAL ERROR/DEVIATION INVESTIGATION REPORT

Severity Classification (Preliminary & Final)			Report Number									
(Notify AAT-200, WOC & ATD thru the ROC within 3 hours)			FAC ID	-	TYPE	-	CY	-	E/D	-	SEQ #	
1. DATE AND TIME OF OCCURRENCE:				2. DATE AND TIME INITIAL INVESTIGATION STARTED:								
DATE (LOCAL)	Time (local)	Time (utc)	DATE (LOCAL)		Time (local)			Time (utc)				
3. INITIALLY REPORTED BY:					4. OTHER INVOLVED FACILITIES:							
<input type="checkbox"/> FACILITY		<input type="checkbox"/> OTHER (Explain here)			FAC ID #1			FAC ID #2				
5. Altitude:		6. Location of Occurrence:			7. CLOSEST PROXIMITY:							
Indicate if on the Surface		Pertinent fix (Fix/Radial/DME), airport surface location or Lat/Long.			Vertical			Lateral (ft/mi/min)				
8. ALERTS: (If installed, explain checked boxes in Summary, Block 21)												
CONFLICT ALERT:		Activated <input type="checkbox"/>		Not activated <input type="checkbox"/>		Not available <input type="checkbox"/>		Suppressed <input type="checkbox"/>		Not installed <input type="checkbox"/>		
MSAW / EMSAW:		Activated <input type="checkbox"/>		Not activated <input type="checkbox"/>		Not available <input type="checkbox"/>		Suppressed <input type="checkbox"/>		Not installed <input type="checkbox"/>		
9 TMU: a. M.A.P.												
b. Alerts: <input type="checkbox"/> Activated <input type="checkbox"/> Non-activated <input type="checkbox"/> Not available												
c. Were any initiatives in place , in response to sector/position volume: <input type="checkbox"/> Yes <input type="checkbox"/> No												
d. If either yes or no, explain why here:												
10 a. Traffic Volume: (# of ACFT)				b. Traffic Complexity:				Low 1 2 3 4 5 High				
11. TYPE OF CONTROL:			12. REQUIRED SEPARATION:									
<input type="checkbox"/> RADAR			<input type="checkbox"/> FAA DIRECTIVE									
<input type="checkbox"/> NON-RADAR			Required Separation			Handbook and Paragraph						
<input type="checkbox"/> OCEANIC			<input type="checkbox"/> LETTER OF AGREEMENT, WITH:									
<input type="checkbox"/> TOWER			FAC. or ORG.			Paragraph			Required Separation			
<input type="checkbox"/> AFSS/FSS												
13. CONTROLLER INFORMATION (Explain activities of each individual in Summary, Block 21):												
Primary			Contributory			Contributory			Contributory			
a. Last 6-digits of SSN:												
b. Title (CPC/DEV/OS/CIC/OM//TMC/TMS/SS/ATM):												
c. Time on position (in minutes):												
d. Area/Sector/Position(s), List ALL positions combined:												
e. Date of last certification (Initial or Recertification):												
f. List previous Errors and/or Deviations:												

REPORT NUMBER									

14 a. ARTCC/TRACON: Was a RA/D-side/Tracker/HO/Coordinator position staffed? Yes No N/A
(If no and volume or complexity was a factor explain in Summary, Block 21)

14 b. Tower: Was Local or Ground Associate positions staffed? Yes No N/A
(If no and volume or complexity was a factor explain in Summary, Block 21)

15. STAFFING	On Duty	On Position	On Break	Other	16. NUMBER OF POSITIONS IN AREA/SECTOR:
a. OS/CIC					a. Available
b. CPC					b. Open
c. DEV					

17 a. OPERATIONAL SUPERVISION: OSIC CIC
b. What was the OSIC/CIC doing when the incident occurred? (Explain and *Be specific.*)

18. WEATHER SEQUENCE:

VMC IMC DUSK DAWN

19. AIRCRAFT INFORMATION

a. Aircraft #1:	TYPE/SUFFIX	NRP <input type="checkbox"/>	TCAS RA: What action was taken?	NMAC <input type="checkbox"/>
Route of Flight/Taxi Route				
b. Aircraft #2:	TYPE/SUFFIX	NRP <input type="checkbox"/>	TCAS RA: What action was taken?	NMAC <input type="checkbox"/>
Route of Flight/Taxi Route				
c. Aircraft #3:	TYPE/SUFFIX	NRP <input type="checkbox"/>	TCAS RA: What action was taken?	NMAC <input type="checkbox"/>
Route of Flight/Taxi Route				

20 Terminal only:

- a. Was takeoff clearance issued YES NO?
- b. If yes, did aircraft start takeoff roll YES NO?
- c. Was takeoff clearance cancelled YES NO?
 - 1. Was aircraft able to abort YES NO?
 - 2. Did aircraft hold in position: YES NO?
 - 3. Proximity when departing aircraft was at taxi speed?
 - 4. How far did aircraft roll in _____ feet?
- d. Was any clearance issued or amended YES NO? Explain:
- e. Was either aircraft issued a go around YES NO?
 - 1. If yes, what was mileage on final _____ when instructions were issued.

Report Number											
			-		-		-		-		

21. POSSIBLE FACTORS: (Check or indicate as many possible factors as you can identify and explain each factor below in Summary, Block 21)

- Procedures Equipment Communications (Hearback/Readback)
 Traffic Management Other(s)

22. SUMMARY: Please describe the events surrounding the incident that occurred. Consider the list of factors above and describe them as necessary to explain the incident. If you receive any Pilots' Comments, please explain what they were here. Be brief as possible, but still FULLY explain the incident:

23. DATA REVIEWED: VOICE TAPE COMPUTER DATA EMPLOYEE STATEMENTS EMPLOYEE INTERVIEWS
 PLAYBACK (SATORI, RAPTOR, Other)

24 a. PERSON MAKING NOTIFICATION: (Facility) DATE & TIME (LOCAL):

24 b. PERSON RECEIVING NOTIFICATION: AXX-505: DATE & TIME (LOCAL):

<input type="checkbox"/> ROC TIME (LOCAL):	<input type="checkbox"/> WOC TIME (LOCAL):	(AAT-200)	DATE & TIME (LOCAL):
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APPENDIX 4. INSTRUCTIONS FOR FAA FORM 7210-3, FINAL OPERATIONAL ERROR/DEVIATION REPORT

GENERAL INFORMATION

The Final Operational Error/Deviation Report (OE/OD), FAA Form 7210-3, has been designed to facilitate the gathering and documentation of factual information concerning the events, which led to the occurrence of an operational error or deviation. It also provides a means of reporting the findings, recommendations, and conclusions of the facility manager and the regional ATD manager.

Situations may arise which are not adequately accounted for in Part I of this report. However, a careful analysis of the facts should usually establish a relationship to the information required in this report. If there are exceptions, when the information cannot be adequately expressed, or there is insufficient room to answer a question, use Block 64, Summary of Incident. Each comment should be prefaced with the block number to which it pertains.

An "*" indicates that an explanation is required or may be required in Block 65, Summary of Incident.

REPORT NUMBER

FAC ID - Enter the facility three-character identifier.

NOTE:

If the facility chargeable for the error/deviation is ARINC, enter "XXX" as the facility three-character identifier.

TYPE - Enter the type of facility:

"T" - Tower
"R" - TRACON

NOTE:

Use "R" for radar only facilities assigned a separate three-character identifier.

"C" - En Route
"F" - Flight Service

NOTE:

ZSU and ZHN should be entered as TRACON facilities and ZUA should be entered as an en route facility.

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

E/D - Enter "E" for error or "D" for deviation.

SEQ# - Enter the sequential number of the incident for the calendar year. Each calendar year operational errors will start with 001 and operational deviations will start with 001. For example, the facility's second operational error is 002 and the thirteenth would be 013. The facility's second operational deviation will be 002 and the thirteenth would be 013.

PART I - Investigative Data

GENERAL INFORMATION

Part I provides for the documentation of the factual data which is gathered by the Investigator-In-Charge (IIC) and, when appointed, an investigation team.

Block 1 - DATE AND TIME OF INCIDENT

The time of an OE is the time that the loss of separation occurred. The time of an OD is the time that the airspace was violated.

DATE: Use the date based on the local date:

EXAMPLE: May 4, 1996 would be entered as "05/04/1996."

TIME: Using the 24-hour clock, enter the local time of the incident.

EXAMPLE- 3:38 p.m. (Time of incident) would be entered as "1538."

Block 2 - RESPONSIBLE FACILITY AND CLASSIFICATION LEVEL

Responsible Facility: The three-letter identifier of the facility completing the report will be automatically entered in this block after the report number has been entered.

Classification Level: Enter the classification at the time of the incident of the facility completing the report. Valid entries are 1 through 5. This will be automatically printed for each incident after the initial facility information is entered in the automated program.

Block 3 - SEVERITY INDEX

Indicate whether this error was classified as: an A, an A, B, C, No Conformance, Controlled with no TCAS, Controlled with TCAS RA or Uncontrolled and Converging, Opposite Courses, Converging, Crossing Courses, Same Course or Diverging/Non-intersecting Courses as determined by AAT-20.

* Block 4 - WAS WEATHER A FACTOR IN THE INCIDENT?

If weather or conditions caused by weather were pertinent to the incident, select "Yes" and explain fully in Block 65, Summary of Incident.

For example, if thunderstorms caused an unexpected route deviation or icing affected the climb, of an aircraft that was involved in an OE/OD, at the time of the incident, select "Yes" and explain.

Block 5 - ALTITUDE/FLIGHT LEVEL OF INCIDENT

IF INCIDENT HAPPENED	ENTER
On the surface	SFC
In the air	Enter an altitude above the surface to the nearest 100 feet omitting the last two digits. <i>Examples:</i> 1 foot - 149 feet, enter "001" 750 feet, enter "008" 1150 feet, enter "012" 29,700 feet, enter "297"

Block 6 - TYPE OF AIRSPACE

Select the type of airspace where the incident occurred, "Other" will require additional information.

Block 7 - LOCATION OF INCIDENT

If the incident occurred in the air, complete FIX, DIRECTION, and DISTANCE unless the location is best described by latitude and longitude.

If the incident occurred on the surface, complete INTERSECTION, RUNWAY and TAXIWAY.

If the incident occurred in the air and is best described by latitude and longitude or in oceanic airspace, complete LATITUDE and LONGITUDE.

FIX: The fix provides a reference as to where the incident occurred. Enter a 3- or 5-letter location identifier whenever possible to clearly identify the fix.

EXAMPLE- Dryer VORTAC would be entered as "DJB." NESTO intersection would be entered as "NESTO."

DIRECTION: Use three digits to indicate the degrees of the radial or course from the NAVAID. If the fix used is an airport, intersection, or waypoint that does not have prescribed radials or a compass rose, use the 16 points of the compass to describe direction.

EXAMPLE- The 10 degree radial would be entered as "010." North-Northeast would be entered as "NNE."

DISTANCE- Specify the distance of the incident from the fix in nautical miles.

EXAMPLE- One nautical mile would be entered as "001." Twenty nautical miles would be entered as "020."

INTERSECTION- Enter the airport intersection closest to the incident.

RUNWAY- Enter the runway(s) closest to the incident. Use a "/" to separate runways that are not left, right, or center. Do not exceed 6 digits.

EXAMPLE- Runway 9 would be entered as "000009." If the incident occurred at or near the intersection of runway 3 and runway 12, it should be entered as "003/12." Runways 9L and 17R would be entered as "09L17R."

TAXIWAY- If the taxiway is described using the phonetic alphabet; enter the letter not the word.

EXAMPLE- Echo would be "E" and HOTEL 1 would be "H1."

LATITUDE:

EXAMPLE- For 48 degrees 35 minutes NORTH, enter "N 48 30 0."

LONGITUDE:

EXAMPLE- For 153 degrees WEST, enter "W 153 0 0."

Block 8 - CLOSEST PROXIMITY

Complete this block for incidents in the air and on the surface.

For aircraft in flight, the closest proximity is expressed in lateral/longitudinal and vertical measurements. When separation is lost, determine the closest proximity as follows: Enter the smallest lateral/longitudinal distance that existed between the aircraft while separation was lost. Then, enter the vertical distance that existed between the aircraft at the time of that smallest lateral/longitudinal distance.

EXAMPLE- At one point two aircraft came within 2.8 miles and 400 feet of each other at the same time. The 400 feet was the smallest vertical distance between the aircraft during the incident. The same two aircraft continued their flight and came within 2.34 miles and 800 feet of each other at the same time; 2.34 miles being the smallest lateral distance between the aircraft during the incident. The proper entry would be "2.34" for lateral and "0800" for vertical.

For situations where lateral/longitudinal distance was constant, enter that constant lateral/longitudinal distance and the smallest vertical distance between the aircraft.

EXAMPLE- Two aircraft were 2 miles apart on parallel routes, one at seven thousand feet and one at six thousand feet. The aircraft at seven thousand feet was cleared to descend to five thousand feet. The vertical distance decreased until the aircraft were at the same altitude, then increased until the descending aircraft leveled at five thousand feet. Enter "2.00," which was the constant (and smallest) lateral distance between the aircraft and "0" which was the smallest vertical distance.

VERTICAL- Enter the vertical distance measured in feet.

EXAMPLE- One foot would be entered as "0001," 100 feet would be entered as "0100," and 1,000 feet would be entered as "1000."

LATERAL- Select "feet," "miles," "minutes," or "N/A" then enter the appropriate lateral distance.

EXAMPLE- Two thousand feet would be entered as "2000," 2.34 miles would be entered as "2.34," and 4 minutes would be entered as "4."

Block 9 - NUMBER OF AIRCRAFT FOR WHICH THE CONTROLLER HAD CONTROL RESPONSIBILITY AT THE TIME OF THE INCIDENT

Enter the number of aircraft for which the controller had separation responsibility, including point outs even though the aircraft may be on another frequency. For incidents involving tower cab local controllers, do not count aircraft waiting in line for departure unless the controller was responsible for their separation.

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.

Block 12 - 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.

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.

*** 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 determine 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.

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		Report Number	
		1. Date and time of incident: MM/DD/YYYY Time (Local) [][]/[][]/[][][][] [][]:[][]	
2. Responsible facility: Classification Level:		3. Severity Index: points <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> Controlled <input type="checkbox"/> Uncontrolled <input type="checkbox"/> Converging, Opposite Flight Paths <input type="checkbox"/> Converging, Crossing Flight Paths <input type="checkbox"/> Same Flight Paths <input type="checkbox"/> Diverging/Non-intersecting Flight Paths	
4. Was weather a factor in the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, explain in Block 65, Summary of Incident.)		5. Altitude/flight level of incident:	
6. Type of airspace: <input type="checkbox"/> Class A <input type="checkbox"/> Class B <input type="checkbox"/> Class C <input type="checkbox"/> Class D <input type="checkbox"/> Other <input type="checkbox"/> Class E <input type="checkbox"/> Class G <input type="checkbox"/> Oceanic <input type="checkbox"/> Airport Surface		7. Location of Incident : Fix: Intersection: Direction: Runway: Distance: Taxiway: Latitude: Longitude: Area/Sector or Position Designator:	
8. Closest Proximity: Vertical Feet Lateral <input type="checkbox"/> Feet <input type="checkbox"/> Miles <input type="checkbox"/> Minutes <input type="checkbox"/> N/A		9. Number of aircraft for which the controller had control responsibility at the time of the incident:	10. Was training in progress? <input type="checkbox"/> Yes <input type="checkbox"/> No
Complete blocks 11-36 for each employee			
11. Enter P for primary or C for contributory:	12. Number of personnel involved:	13. Employee's facility: Three-letter Identification Level Type	
14. Reserved:	15. Date of birth: MM/DD/YYYY	16. Social Security Number: Last six digits only	
17. Indicate the performance level of the employee: <input type="checkbox"/> Developmental <input type="checkbox"/> ATCS <input type="checkbox"/> Supervisor <input type="checkbox"/> Staff Specialist <input type="checkbox"/> Other If ATCS, how long since ATCS in current facility? YY-MM	18. Last date of certification or recertification on position: MM/DD/YYYY <input type="checkbox"/> Initial Certification <input type="checkbox"/> Recertification	19. Has training relevant to the incident been received within the last 12 months? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, list the type and the date of that training in this block:	
19A. During the 2 1/2 years prior to the incident, in how many Operational Errors has the employee been found to be the primary cause?			
19B. 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																								
Employee :													Continuation Page 2														
11. Enter P for primary or C for contributory:				12. Number of personnel involved:				13. Employee's facility:																			
								<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width: 30%;">Three-letter Identification</th> <th style="width: 30%;">Level</th> <th style="width: 40%;">Type</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>					Three-letter Identification	Level	Type												
Three-letter Identification	Level	Type																									
14. Employee Identifier:					15. Date of birth: MM/DD/YYYY				16. Social Security Number: Last 6 digits only																		
17. Indicate the performance level of the employee: <input type="checkbox"/> Developmental <input type="checkbox"/> ATCS <input type="checkbox"/> Supervisor <input type="checkbox"/> Staff Specialist <input type="checkbox"/> Other If ATCS, how long since ATCS in current facility? YY-MM				18. Last date of certification or recertification on position: MM/DD/YYYY <input type="checkbox"/> Initial Certification <input type="checkbox"/> Recertification				19. Has training relevant to the incident been received within the last 12 months? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, list the type and the date of that training in this block:																			
19A. During the 2 1/2 years prior to the incident, in how many Operational Errors has the employee been found to be the primary cause?																											
19B. During the 2 1/2 years prior to the incident, in how many Operational Errors has the employee been found to be contributory?																											
20. Is a medical certification issue related to the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, explain in Block 65, Summary of Incident.)				21. Identify and describe the type of work schedule being worked at the time of the incident:				22. Current and previous shift: <table style="width:100%;"> <tr> <td style="width: 50%;">Previous shift</td> <td style="width: 50%;"></td> </tr> <tr> <td>Sign in</td> <td style="text-align: right;">Sign out</td> </tr> <tr> <td colspan="2"> </td> </tr> <tr> <td>Current shift</td> <td></td> </tr> <tr> <td>Sign in</td> <td style="text-align: right;">Sign out</td> </tr> </table>					Previous shift		Sign in	Sign out			Current shift		Sign in	Sign out					
Previous shift																											
Sign in	Sign out																										
Current shift																											
Sign in	Sign out																										
23. Area of specialization:		24. Sector or position: Number and Name		25. Time on position: Minutes		26. What sectors or positions were combined at the position being staffed at the time of the incident?																					
27. Which associated positions were staffed at the time of the incident?																											
28. Position function: <table style="width:100%; font-size: small;"> <tr> <td><input type="checkbox"/> Radar</td> <td><input type="checkbox"/> Radar Associate</td> <td><input type="checkbox"/> Hand-off</td> <td><input type="checkbox"/> Local Control</td> <td><input type="checkbox"/> Ground Control</td> </tr> <tr> <td><input type="checkbox"/> Flight Data</td> <td><input type="checkbox"/> Clearance Delivery</td> <td><input type="checkbox"/> Departure Position</td> <td><input type="checkbox"/> Arrival Position</td> <td><input type="checkbox"/> Supervisor</td> </tr> <tr> <td><input type="checkbox"/> Air Traffic Assistant</td> <td><input type="checkbox"/> Traffic Management Coordinator</td> <td><input type="checkbox"/> Tracker</td> <td><input type="checkbox"/> Other</td> <td></td> </tr> </table>													<input type="checkbox"/> Radar	<input type="checkbox"/> Radar Associate	<input type="checkbox"/> Hand-off	<input type="checkbox"/> Local Control	<input type="checkbox"/> Ground Control	<input type="checkbox"/> Flight Data	<input type="checkbox"/> Clearance Delivery	<input type="checkbox"/> Departure Position	<input type="checkbox"/> Arrival Position	<input type="checkbox"/> Supervisor	<input type="checkbox"/> Air Traffic Assistant	<input type="checkbox"/> Traffic Management Coordinator	<input type="checkbox"/> Tracker	<input type="checkbox"/> Other	
<input type="checkbox"/> Radar	<input type="checkbox"/> Radar Associate	<input type="checkbox"/> Hand-off	<input type="checkbox"/> Local Control	<input type="checkbox"/> Ground Control																							
<input type="checkbox"/> Flight Data	<input type="checkbox"/> Clearance Delivery	<input type="checkbox"/> Departure Position	<input type="checkbox"/> Arrival Position	<input type="checkbox"/> Supervisor																							
<input type="checkbox"/> Air Traffic Assistant	<input type="checkbox"/> Traffic Management Coordinator	<input type="checkbox"/> Tracker	<input type="checkbox"/> Other																								

Final Operational Error/Deviation Report		Report Number															
Employee :		Continuation Page 2															
29. Did any operational personnel request assistance prior to the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, explain in Block 65, Summary of Incident.)						30. Were any operational personnel aware that an Operational Error/Deviation was developing? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain in Block 65, Summary of incident.)											
31. Did the employee contemplate taking corrective action? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain in Block 65, Summary of Incident.)						32. Did any operational personnel attempt to take corrective action? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain in Block 65, Summary of Incident.)											
33. Operational personnel were alerted to the incident by: Equipment: <input type="checkbox"/> Conflict Alert <input type="checkbox"/> MSAW/EMSAW Personnel: <input type="checkbox"/> Self-identified <input type="checkbox"/> Facility personnel Non-facility Personnel: <input type="checkbox"/> Pilot <input type="checkbox"/> Another facility Other:																	
34. Date and time operational personnel became aware of the incident: MM/DD/YYYY Time(local)						35. Was the Distance Reference Indicator (i.e., J-Ring) being used? <input type="checkbox"/> Yes <input type="checkbox"/> No											
36. Were there any distractions or environmental conditions that may have influenced the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, provide explanation in the incident 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 Report		Report Number													
<p>37. Was an OSIC or CIC on duty at the time of the incident?</p> <p style="text-align: center;">Enter A for OSIC Enter C for CIC</p>	<p>38. Was the assigned OSIC/CIC present in the operational area at the time of the incident?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p>														
<p>39. Did the employee require OSIC/CIC assistance prior to the incident?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>40. Did the assigned OSIC/CIC provide assistance?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="text-align: center;">(Explain in Block 65, Summary of Incident.)</p>														
<p>41. If sectors were combined, did the OSIC/CIC approve the combination?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not combined <input type="checkbox"/> N/A</p>	<p>42. If the positions were combined, did the OSIC/CIC approve the combination?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not combined</p>														
<p>43. In what activity was the assigned OSIC/CIC engaged at the time of the incident?</p> <p><input type="checkbox"/> General Supervision <input type="checkbox"/> Administering training</p> <p><input type="checkbox"/> Direct operational supervision <input type="checkbox"/> Receiving training</p> <p><input type="checkbox"/> Working a position of operation <input type="checkbox"/> Other</p>		<p>44. Was the OSIC/CIC certified in the area of specialization where the incident took place?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (If no, explain here)</p>													
<p>45. Traffic complexity?</p> <p style="text-align: center;"> 1 2 3 4 5 Low Avg. High </p>	<p>46. Indicate which factors were associated with traffic complexity.</p> <p><input type="checkbox"/> Weather <input type="checkbox"/> Runway configuration</p> <p><input type="checkbox"/> Terrain <input type="checkbox"/> Runway condition</p> <p><input type="checkbox"/> Airspace configuration <input type="checkbox"/> Flow control</p> <p><input type="checkbox"/> Number of aircraft <input type="checkbox"/> Special Event</p> <p><input type="checkbox"/> Experience level <input type="checkbox"/> Other</p> <p><input type="checkbox"/> Emergency situation</p>														
<p>47. Type of Control Provided</p> <p><input type="checkbox"/> Radar <input type="checkbox"/> AFSS/FSS</p> <p><input type="checkbox"/> Tower <input type="checkbox"/> TFM</p> <p><input type="checkbox"/> Oceanic</p> <p><input type="checkbox"/> Non-radar</p>	<p>48. Required separation was by:</p> <p style="text-align: center;"><input type="checkbox"/> FAA Order</p> <p style="text-align: center;"><input type="checkbox"/> Facility Letter of Agreement (LOA) or Directive</p> <p>FAA Order: _____ Facility LOA/Directive: _____</p> <p>Paragraph: _____ Paragraph: _____</p>														
<p>49. Were any deficient procedures noted as a result of the incident?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="text-align: center;">(If yes, explain here)</p>	<p>50. Were any special procedures in effect at the time of the incident (e.g. Traffic Management Program)?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="text-align: center;">(If yes, explain here)</p>														

Final Operational Error/Deviation Report		Report Number																					
(Complete additional sections if more than two aircraft are involved)																							
51. Number of aircraft/vehicles involved in the incident:																							
	Aircraft/Vehicle No. 1					Aircraft/Vehicle No. 2																	
52. Identification																							
53. Prefix/type/suffix																							
54. Flight/vehicle profile at time of time of incident																							
				<input type="checkbox"/> Descending <input type="checkbox"/> Touching down <input type="checkbox"/> Level flight <input type="checkbox"/> Taxiing-runway <input type="checkbox"/> Climbing <input type="checkbox"/> Other				<input type="checkbox"/> Making approach <input type="checkbox"/> Radar vector <input type="checkbox"/> Takeoff roll <input type="checkbox"/> Landing roll <input type="checkbox"/> Holding in position on runway								<input type="checkbox"/> Descending <input type="checkbox"/> Touching down <input type="checkbox"/> Level flight <input type="checkbox"/> Taxiing-runway <input type="checkbox"/> Climbing <input type="checkbox"/> Other				<input type="checkbox"/> Making approach <input type="checkbox"/> Radar vector <input type="checkbox"/> Takeoff roll <input type="checkbox"/> Landing roll <input type="checkbox"/> Holding in position on runway			
55. Aircraft ground speed																							
				<input type="checkbox"/> N/A _____ Knots								<input type="checkbox"/> N/A _____ Knots											
56. TCAS equipped																							
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown								<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown															
57. Evasive action																							
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> TCAS <input type="checkbox"/> Unknown								<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> TCAS <input type="checkbox"/> Unknown															
58. Did the pilot file a Near Midair Collision Report																							
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown								<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown															
59. Aircraft and Obstruction/Obstacles																							
<input type="checkbox"/> Terrain <input type="checkbox"/> Vehicle(s) <input type="checkbox"/> Personnel <input type="checkbox"/> Obstruction <input type="checkbox"/> Equipment <input type="checkbox"/> Protected Airspace <input type="checkbox"/> Airport Movement Area (explain) <input type="checkbox"/> Not applicable <input type="checkbox"/> Other (explain)																							
60. Was equipment layout or design a factor in the incident?								61. Was any pertinent equipment reported as functioning unsatisfactorily before the incident?															
<input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, explain in Block 65, Summary of Incident.)								<input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, explain in Block 65, Summary of Incident.)															
62. System(s) in use:																							
<input type="checkbox"/> HOST <input type="checkbox"/> EBUS/HOST (FDP) <input type="checkbox"/> EBUS <input type="checkbox"/> URET <input type="checkbox"/> Mode S				<input type="checkbox"/> CENRAP <input type="checkbox"/> ASR-9 <input type="checkbox"/> ASR-11 <input type="checkbox"/> ARTS IIE <input type="checkbox"/> ARTS IIIA				<input type="checkbox"/> ARTS IIIIE <input type="checkbox"/> MEARTS <input type="checkbox"/> ACDs on ARTS <input type="checkbox"/> STARS on ARTS <input type="checkbox"/> STARS				<input type="checkbox"/> D-BRITE <input type="checkbox"/> BRITE IV <input type="checkbox"/> AMASS <input type="checkbox"/> ASDE II <input type="checkbox"/> ASDE III				<input type="checkbox"/> ASDE-X <input type="checkbox"/> Model 1 <input type="checkbox"/> OASIS <input type="checkbox"/> Other:							
63. Was radar transition from one system to another in progress?								64. What was the status of the Conflict Alert at the time of the incident?															
<input type="checkbox"/> Yes <input type="checkbox"/> No (if yes, explain here)								<input type="checkbox"/> Activated <input type="checkbox"/> Not available <input type="checkbox"/> Not activated <input type="checkbox"/> Not Installed <input type="checkbox"/> Suppressed															
								64a. What was the status of the AMASS or ASDE at the time of the incident?															
								<input type="checkbox"/> Active <input type="checkbox"/> Limited Mode <input type="checkbox"/> Off/OTS/NA															

Final Operational Error/Deviation Report		Report Number																	
Additional aircraft sections																			
51. Number of aircraft/vehicles involved in the incident:																			
	Aircraft/Vehicle No.					Aircraft/Vehicle No.													
52. Identification																			
53. Prefix/type/suffix																			
54. Flight/vehicle profile at time of incident																			
				<input type="checkbox"/> Descending	<input type="checkbox"/> Making approach						<input type="checkbox"/> Descending	<input type="checkbox"/> Making approach							
				<input type="checkbox"/> Touching down	<input type="checkbox"/> Radar vector						<input type="checkbox"/> Touching down	<input type="checkbox"/> Radar vector							
				<input type="checkbox"/> Level flight	<input type="checkbox"/> Takeoff roll						<input type="checkbox"/> Level flight	<input type="checkbox"/> Takeoff roll							
				<input type="checkbox"/> Taxiing-runway	<input type="checkbox"/> Landing roll						<input type="checkbox"/> Taxiing-runway	<input type="checkbox"/> Landing roll							
				<input type="checkbox"/> Climbing	<input type="checkbox"/> Holding in position on runway						<input type="checkbox"/> Climbing	<input type="checkbox"/> Holding in position on runway							
				<input type="checkbox"/> Other							<input type="checkbox"/> Other								
55. Aircraft ground speed																			
				<input type="checkbox"/> N/A	_____ Knots						<input type="checkbox"/> N/A	_____ Knots							
56. TCAS equipped																			
				<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown					<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown						
57. Evasive action																			
				<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> TCAS	<input type="checkbox"/> Unknown					<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> TCAS	<input type="checkbox"/> Unknown				
58. Did the pilot file a Near Midair Collision Report																			
				<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown					<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown						

Additional aircraft sections																			
51. Number of aircraft/vehicle involved in the incident:																			
	Aircraft/Vehicle No.					Aircraft/Vehicle No.													
52. Identification																			
53. Prefix/type/suffix																			
54. Flight/vehicle profile at time of incident																			
				<input type="checkbox"/> Descending	<input type="checkbox"/> Making approach						<input type="checkbox"/> Descending	<input type="checkbox"/> Making approach							
				<input type="checkbox"/> Touching down	<input type="checkbox"/> Radar vector						<input type="checkbox"/> Touching down	<input type="checkbox"/> Radar vector							
				<input type="checkbox"/> Level flight	<input type="checkbox"/> Takeoff roll						<input type="checkbox"/> Level flight	<input type="checkbox"/> Takeoff roll							
				<input type="checkbox"/> Taxiing-runway	<input type="checkbox"/> Landing roll						<input type="checkbox"/> Taxiing-runway	<input type="checkbox"/> Landing roll							
				<input type="checkbox"/> Climbing	<input type="checkbox"/> Holding in position on runway						<input type="checkbox"/> Climbing	<input type="checkbox"/> Holding in position on runway							
				<input type="checkbox"/> Other							<input type="checkbox"/> Other								
55. Aircraft ground speed																			
				<input type="checkbox"/> N/A	_____ Knots						<input type="checkbox"/> N/A	_____ Knots							
56. TCAS equipped																			
				<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown					<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown						
57. Evasive action																			
				<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> TCAS	<input type="checkbox"/> Unknown					<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> TCAS	<input type="checkbox"/> Unknown				
58. Did the pilot file a Near Midair Collision Report																			
				<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown					<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown						

Final Operational Error/Deviation Report	Report Number											
65. SUMMARY OF INCIDENT												

Final Operational Error/Deviation Report	Report Number
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65. SUMMARY OF INCIDENT (continued from page 5)

66. INVESTIGATORS		
Date	Typed/Printed Name	Signature
<div style="border: 1px solid black; width: 100%; height: 15px; margin-bottom: 5px;"></div> MM/DD/YYYY	<div style="border-bottom: 1px solid black; width: 100%;"></div> First/MI/Last Name	<div style="border-bottom: 1px solid black; width: 100%;"></div> Investigator-in-Charge
<div style="border: 1px solid black; width: 100%; height: 15px; margin-bottom: 5px;"></div> MM/DD/YYYY	<div style="border-bottom: 1px solid black; width: 100%;"></div> First/MI/Last Name	<div style="border-bottom: 1px solid black; width: 100%;"></div> Team Member
<div style="border: 1px solid black; width: 100%; height: 15px; margin-bottom: 5px;"></div> MM/DD/YYYY	<div style="border-bottom: 1px solid black; width: 100%;"></div> First/MI/Last Name	<div style="border-bottom: 1px solid black; width: 100%;"></div> Team Member
<div style="border: 1px solid black; width: 100%; height: 15px; margin-bottom: 5px;"></div> MM/DD/YYYY	<div style="border-bottom: 1px solid black; width: 100%;"></div> First/MI/Last Name	<div style="border-bottom: 1px solid black; width: 100%;"></div> Team Member
<div style="border: 1px solid black; width: 100%; height: 15px; margin-bottom: 5px;"></div> MM/DD/YYYY	<div style="border-bottom: 1px solid black; width: 100%;"></div> First/MI/Last Name	<div style="border-bottom: 1px solid black; width: 100%;"></div> Team Member
<div style="border: 1px solid black; width: 100%; height: 15px; margin-bottom: 5px;"></div> MM/DD/YYYY	<div style="border-bottom: 1px solid black; width: 100%;"></div> First/MI/Last Name	<div style="border-bottom: 1px solid black; width: 100%;"></div> Team Member
<div style="border: 1px solid black; width: 100%; height: 15px; margin-bottom: 5px;"></div> MM/DD/YYYY	<div style="border-bottom: 1px solid black; width: 100%;"></div> First/MI/Last Name	<div style="border-bottom: 1px solid black; width: 100%;"></div> Team Member
<div style="border: 1px solid black; width: 100%; height: 15px; margin-bottom: 5px;"></div> MM/DD/YYYY	<div style="border-bottom: 1px solid black; width: 100%;"></div> First/MI/Last Name	<div style="border-bottom: 1px solid black; width: 100%;"></div> Team Member

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

Final Operational Error/Deviation Report	Report Number
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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
 Procedural
 Equipment
 Other (Explain in Block 69)

68. Causal Factors	No	Yes	
		A	
A. Data Posting			
(1) Computer Entry	<input type="checkbox"/>		
Incorrect input		<input type="checkbox"/>	
Incorrect update		<input type="checkbox"/>	
Premature termination of data		<input type="checkbox"/>	
Input/Update not made		<input type="checkbox"/>	
Other (explain):		<input type="checkbox"/>	
(2) Flight Progress Strip	<input type="checkbox"/>		
Not updated		<input type="checkbox"/>	
Interpreted incorrectly		<input type="checkbox"/>	
Posted incorrectly		<input type="checkbox"/>	
Updated incorrectly		<input type="checkbox"/>	
Prematurely removed		<input type="checkbox"/>	
Other (explain):		<input type="checkbox"/>	
B. Radar Display	<input type="checkbox"/>		
(1) Misidentification	<input type="checkbox"/>		
Failure to re-identify aircraft when the accepted target identity becomes questionable		<input type="checkbox"/>	
Overlapping data blocks		<input type="checkbox"/>	
Acceptance of incomplete or difficult to correlate position information		<input type="checkbox"/>	
Other (explain):		<input type="checkbox"/>	
(2) Inappropriate Use of Displayed Data	<input type="checkbox"/>		
MODE C		<input type="checkbox"/>	
BRITE		<input type="checkbox"/>	
Conflict alert		<input type="checkbox"/>	
Failure to detect displayed data		<input type="checkbox"/>	
Failure to comprehend displayed data		<input type="checkbox"/>	
Failure to project future status of displayed data		<input type="checkbox"/>	
Other (explain):		<input type="checkbox"/>	
C. Aircraft Observation (Towers Only)	<input type="checkbox"/>		
(1) Actual Observation of Aircraft		<input type="checkbox"/>	
(2) Improper Use of Visual Data	<input type="checkbox"/>		
Landing		<input type="checkbox"/>	
Taking Off		<input type="checkbox"/>	
Ground Operation	<input type="checkbox"/>		
Taxiing across runway		<input type="checkbox"/>	
Holding in position for takeoff		<input type="checkbox"/>	
Other (explain):		<input type="checkbox"/>	

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

Final Operational Error/Deviation Report		Report Number																		
69. FACILITY MANAGER'S RECOMMENDATIONS AND CORRECTIVE ACTIONS																				
Date					Typed/Printed Name of Facility Manager					Signature										
MM/DD/YYYY					First/M/Last Name															

Final Operational Error/Deviation Report	Report Number								
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Part III. SERVICE AREA DIRECTOR

70. SERVICE AREA DIRECTOR'S CONCLUSIONS AND RECOMMENDATIONS

This Block does not apply to OE/ODs attributed to contractor-operated Flight Service Station.

I concur with the recommendations and corrective actions of the facility manager.

Date	Typed/Printed Name of Service Area Director	Signature										
<table border="1" style="margin: auto;"> <tr> <td style="width: 20px;"> </td><td style="width: 20px;"> </td> </tr> </table> MM/DD/YYYY											<hr/> First/MI/Last Name	<hr/>

Final Operational Error/Deviation Report	Report Number											
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70. SERVICE AREA DIRECTOR'S CONCLUSIONS AND RECOMMENDATIONS (continued from page12)

APPENDIX 6.
INSTRUCTIONS AND EXAMPLE OF FAA FORM 7210-5,
OPERATIONAL ERROR/DEVIATION RECLASSIFICATION REPORT

1. REPORT NUMBER: - - - -	
2. OCCURRENCE RECLASSIFIED: TO: <input type="checkbox"/> MILITARY FACILITY DEVIATION <input type="checkbox"/> PILOT DEVIATION <input type="checkbox"/> NO OCCURRENCE	
3. DATE OF OCCURRENCE:	
4. TIME OF OCCURRENCE: (Z)	
5. NAME/TITLE OF PERSON REPORTING RECLASSIFICATION:	
6. DATE OF RECLASSIFICATION:	
7. TYPED OR PRINTED NAME OF AIR TRAFFIC DIVISION MANAGER:	8. SIGNATURE:

FAA Form 7210-5 (08/02) Supersedes Previous Edition

General Information

After an FAA Form 7210-2, Preliminary Operational Error Investigation, has been completed and telephone notification to FAA Washington Headquarters has been accomplished, a review of the data by a reporting facility official (e.g., ATM) may result in a reclassification of an operational error or deviation to one of the following:

- ☒ Pilot Deviation
- ☒ Military Facility Deviation
- ☒ No Occurrence

The Operational Error/Deviation Reclassification Report, FAA Form 7210-5, provides a means of reporting such a reclassification without requiring the IIC to complete the Final Operational Error/Deviation Report, FAA Form 7210-3.

The Regional Air Traffic Division Manager, along with AAT-20 must concur with the reclassification.

Instructional Guide

1. **REPORT NUMBER.** Enter the report number of the Preliminary Operational Error/Deviation Report.
2. **OCCURRENCE RECLASSIFIED** Place an "X" in the appropriate box that represents the new classification.
3. **DATE OF OCCURRENCE.** Enter the date (*month-day-year*) of the error or deviation.
4. **TIME OF OCCURRENCE (UTC)** Self explanatory
5. **NAME AND TITLE OF PERSON REPORTING THE RECLASSIFICATION** Self explanatory
6. **DATE OF RECLASSIFICATION** Self explanatory
7. **TYPED OR PRINTED NAME OF ATM** Self explanatory
8. **SIGNATURE** Self explanatory

APPENDIX 7.
INSTRUCTIONS FOR FAA FORM 7230-6,
FLIGHT ASSIST REPORT

INSTRUCTIONS

This form will facilitate analysis and correlation of the significant factors that can individually or in combination, result in a pilot requiring assistance from an FAA air traffic control or flight service facility. Complete this form for each incident in which in-flight assistance is provided to the pilot of an aircraft in a potentially dangerous situation. To ensure uniformity of information, follow the instructions below.

The word **Outstanding** should be entered at the top center of the form for all Outstanding Flight Assists.

REGION: Use three letter regional identifier (AAL, ACE, AEA, AGL, ANE, ANM, ASO, ASW, AWP).

FLIGHT ASSIST REPORT NO.: Assign number using three digits; start with 001 at beginning of each calendar year.

ITEM

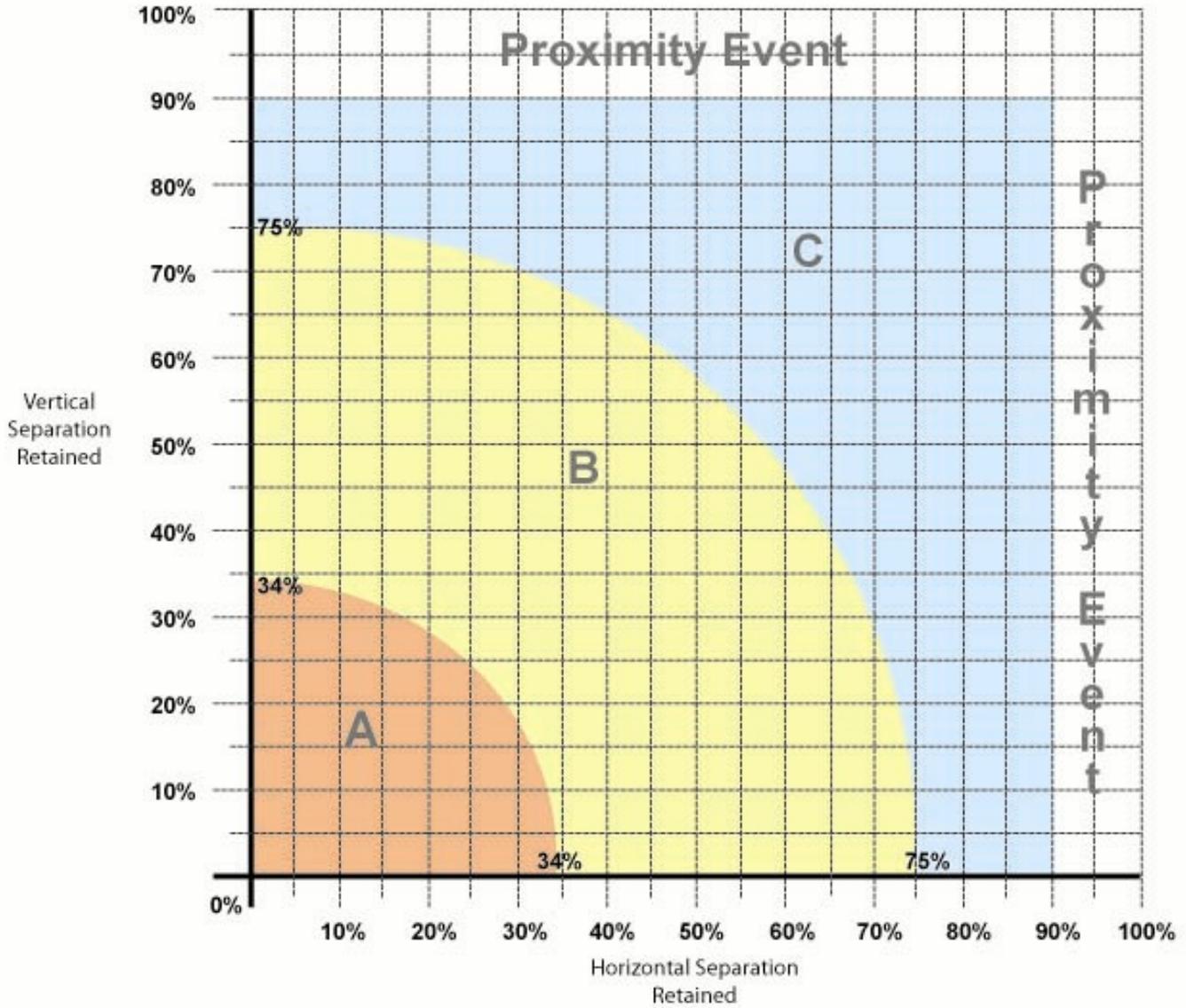
1. Use FAA three-letter identifier
2. Use six digits to specify date of assist, such as 010101 for January 1, 2001.
3. Supply UTC at which initial contact was made with aircraft requiring flight assistance. Use four digits.
4. Use aircraft registration number or if applicable, FAA authorized call sign.
5. Self-explanatory.
6. Self-explanatory.
7. Self-explanatory.
8. Indicate type of facility making report.
9. Indicate whether flight assist occurred during daylight or darkness.
10. Indicate if an Incident Report, FAA Form 8020-11 was filed.
11. Place an "X" in the box that describes the aircraft involved in the flight assist. Use FAA designator for the type of aircraft in the last box.
12. Self-explanatory.
13. Indicate actual flight conditions in the vicinity at the time the aircraft made it's initial call.
14. Indicate primary cause that triggered the flight incident. If an "X" is placed in the equipment malfunction or other box, explain as necessary in Item 16. Only mark "Other" when the primary cause for the flight assist is not indicated elsewhere in Item 14.
15. Self-Explanatory.
16. Give a brief narrative summary of the incident. Include the results such as damage to the aircraft and whether other aircraft were delayed; further explanation of Items 13 and 14 if appropriate; and any other significant factors, comments or recommendations. The pilot's name and address should be included, if known, or if obtainable from the pilot. Use additional sheets if more space is required.
17. Indicate the employee(s) primarily responsible for the flight assist with and asterisk (*).

**APPENDIX 8.
EXAMPLE OF FAA FORM 7230-6, FLIGHT ASSIST REPORT**

FLIGHT ASSIST REPORT						REGION	FLIGHT ASSIST REPORT NO.			
1. FACILITY		2. DATE		3. TIME (UTC)		4. AIRCRAFT IDENTIFICATION		5. NO. PERSONS ON BOARD		
6. POINT OF DEPARTURE				7. ORIGINAL DESTINATION			For Items 8-15 place "X" in appropriate box except where designated otherwise.			
8. FACILITY TYPE	FSS <input type="checkbox"/>	TERMINAL <input type="checkbox"/>	CENTER <input type="checkbox"/>	9 OCCURRED DURING HOURS OF	DAYLIGHT <input type="checkbox"/>	DARKNESS <input type="checkbox"/>	10. INCIDENT REPORT FAA FORM 8020-11, filed		YES <input type="checkbox"/>	NO <input type="checkbox"/>
11. AIRCRAFT DESCRIPTION		AIRCRAFT CATEGORY			TYPE		NUMBER OF ENGINES			DESIGNATION (Specify)
		GEN. AVIA <input type="checkbox"/>	MILITARY <input type="checkbox"/>	AIR CARRIER <input type="checkbox"/>	PISTON <input type="checkbox"/>	TURBINE <input type="checkbox"/>	ONE <input type="checkbox"/>	TWO <input type="checkbox"/>	THREE OR MORE <input type="checkbox"/>	
12. FLIGHT PLAN		VFR <input type="checkbox"/>	IFR <input type="checkbox"/>	NONE <input type="checkbox"/>	13. ACTUAL FLIGHT CONDITIONS		VFR <input type="checkbox"/>	IFR <input type="checkbox"/>	VFR ON TOP <input type="checkbox"/>	UNKNOWN <input type="checkbox"/>
14. PRIMARY CAUSE	LOST <input type="checkbox"/>	LOW FUEL <input type="checkbox"/>	CAUGHT ON TOP <input type="checkbox"/>	EQUIPMENT MALFUNCTION			OTHER (Specify)			
				COMM. <input type="checkbox"/>	NAV. <input type="checkbox"/>	MECH. <input type="checkbox"/>				
15. PRIMARY METHOD OF ASSISTANCE		RADAR <input type="checkbox"/>	DF <input type="checkbox"/>	VOR <input type="checkbox"/>	ADF <input type="checkbox"/>	OTHER AIRCRAFT <input type="checkbox"/>	GEOGRAPHICAL FEATURES <input type="checkbox"/>		SPECIALIST DETECTED AND ADVISED PILOT <input type="checkbox"/>	
16. BRIEF SUMMARY OF INCIDENT										
17. ATC SPECIALIST WHO PROVIDED FLIGHT ASSISTANCE SERVICE										
NAME				POSITION WORKED				TITLE AND GRADE		
SIGNATURE (Air Traffic Manager)				COPY DISTRIBUTION A -505, ATX-400, FSDO- , Facility Files						

APPENDIX 9. NON-WAKE SEPARATION CONFORMANCE CATEGORIZATION

Figure 9-1: Non-Wake Separation Conformance Categorization



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	<input type="text"/> ft	1000 <input type="button" value="v"/> ft
Horizontal	<input type="text"/> nm	3 <input type="button" value="v"/> nm
Wake Event	<input type="button" value="No"/> <input type="button" value="v"/>	

Rating:

Combined Percentage:

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

Separation Conformance Calculator		
Wake Event	No ▾	
	Vertical	Horizontal
Required Separation	1000 ▾ ft	3 ▾ nm
Actual Separation		
1	<input type="text"/> ft	<input type="text"/> nm
2	<input type="text"/> ft	<input type="text"/> nm
3	<input type="text"/> ft	<input type="text"/> nm
4	<input type="text"/> ft	<input type="text"/> nm
5	<input type="text"/> ft	<input type="text"/> nm
6	<input type="text"/> ft	<input type="text"/> nm
7	<input type="text"/> ft	<input type="text"/> nm
8	<input type="text"/> ft	<input type="text"/> nm
Rating:	<input type="text"/>	
	<input type="button" value="Calculate"/>	<input type="button" value="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:

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

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

Lateral	Vertical									
	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	PE	PE	PE	PE	PE	PE	PE	PE	PE
2.69-2.25 NM	C	C	C	C	C	C	C	C	C	PE
2.24-2.23 NM	B	C	C	C	C	C	C	C	C	PE
2.22-2.17 NM	B	B	C	C	C	C	C	C	C	PE
2.16-2.07 NM	B	B	B	C	C	C	C	C	C	PE
2.06-1.91 NM	B	B	B	B	C	C	C	C	C	PE
1.90-1.68 NM	B	B	B	B	B	C	C	C	C	PE
1.67-1.35 NM	B	B	B	B	B	B	C	C	C	PE
1.34-1.02 NM	B	B	B	B	B	B	B	C	C	PE
1.01-0.98 NM	A	B	B	B	B	B	B	C	C	PE
0.97-0.83 NM	A	A	B	B	B	B	B	C	C	PE
0.82-0.81 NM	A	A	A	B	B	B	B	C	C	PE
0.80-0.48 NM	A	A	A	B	B	B	B	B	C	PE
0.47-0.00 NM	A	A	A	A	B	B	B	B	C	PE

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

Lateral	Vertical									
	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	C	C	C	C	C	C	C	C	C	PE
3.74- 3.72 NM	B	C	C	C	C	C	C	C	C	PE
3.71- 3.62 NM	B	B	C	C	C	C	C	C	C	PE
3.61- 3.44 NM	B	B	B	C	C	C	C	C	C	PE
3.43- 3.18 NM	B	B	B	B	C	C	C	C	C	PE
3.17- 2.80 NM	B	B	B	B	B	C	C	C	C	PE
2.79- 2.25 NM	B	B	B	B	B	B	C	C	C	PE
2.24- 1.70 NM	B	B	B	B	B	B	B	C	C	PE
1.69- 1.63 NM	A	B	B	B	B	B	B	C	C	PE
1.62- 1.38 NM	A	A	B	B	B	B	B	C	C	PE
1.37- 1.35 NM	A	A	A	B	B	B	B	C	C	PE
1.34- 0.80 NM	A	A	A	B	B	B	B	B	C	PE
0.79- 0.00 NM	A	A	A	A	B	B	B	B	C	PE

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

Lateral	Vertical									
	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	C	C	C	C	C	C	C	C	C	C
3.74-3.72 NM	B	B	C	C	C	C	C	C	C	C
3.71-3.68 NM	B	B	B	C	C	C	C	C	C	C
3.67-3.62 NM	B	B	B	B	C	C	C	C	C	C
3.61-3.54 NM	B	B	B	B	B	C	C	C	C	C
3.53-3.44 NM	B	B	B	B	B	B	C	C	C	C
3.43-3.32 NM	B	B	B	B	B	B	B	C	C	C
3.31-3.18 NM	B	B	B	B	B	B	B	B	C	C
3.17-3.00 NM	B	B	B	B	B	B	B	B	B	C
2.99-1.70 NM	B	B	B	B	B	B	B	B	B	B
1.69 NM	A	B	B	B	B	B	B	B	B	B
1.68-1.63 NM	A	A	B	B	B	B	B	B	B	B
1.62-1.53 NM	A	A	A	B	B	B	B	B	B	B
1.52-1.38 NM	A	A	A	A	B	B	B	B	B	B
1.37-1.16 NM	A	A	A	A	A	B	B	B	B	B
1.15-0.80 NM	A	A	A	A	A	A	B	B	B	B
0.79-0.00 NM	A	A	A	A	A	A	A	B	B	B
Lateral	Vertical									
	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									
4.49-2.80 NM	C	C	C	C	C	C	C	C	PE	PE
2.79-2.55 NM	B	C	C	C	C	C	C	C	PE	PE
2.54-2.25 NM	B	B	C	C	C	C	C	C	PE	PE
2.24-1.88 NM	B	B	B	C	C	C	C	C	PE	PE
1.87-1.35 NM	B	B	B	B	C	C	C	C	PE	PE
1.34-0.00 NM	B	B	B	B	B	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 equals	3.99 - 3.40 NM
B equals	3.39 - 2.80 NM
A equals	≤ 2.79 NM

5 NM Horizontal

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

6 NM Horizontal

C equals	5.99 - 5.10 NM
B equals	5.09 - 4.20 NM
A equals	≤ 4.19 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)
- l. 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.

<h1 style="margin: 0;">ATC PROXIMITY EVENT</h1> <p style="margin: 0;">INVESTIGATIVE REPORT</p>			Report Number													
						-				P						
			FAC ID		-	TYPE		-	CY		-	P		-	SEQ #	
1. DATE AND TIME OF EVENT:				2. EVENT LOCATION (COMPLETE ONE):												
DATE (LOCAL):		TIME (LOCAL):		TIME (UTC):		FIX/RADIAL/DME: / /			LAT: ° ' "			LON: ° ' "				
						AIRPORT LOCATION:			OTHER:							
3. PROXIMITY (CLOSEST):			4. EVENT REPORTED BY:				5. ALERTS:									
VERTICAL:			<input type="checkbox"/> REPORTING FACILITY <input type="checkbox"/> AUTOMATION/OEDP <input type="checkbox"/> CONTROLLER/OTHER PERSONNEL <input type="checkbox"/> OTHER FACILITY & (FAC ID): <input type="checkbox"/> OTHER (EXPLAIN):				CONFLICT ALERT: <input type="checkbox"/> ACTIVATED <input type="checkbox"/> SUPPRESSED <input type="checkbox"/> NOT ACTIVATED <input type="checkbox"/> NOT AVAILABLE <input type="checkbox"/> NOT INSTALLED			MSAW/EMSAW: <input type="checkbox"/> ACTIVATED <input type="checkbox"/> SUPPRESSED <input type="checkbox"/> NOT ACTIVATED <input type="checkbox"/> NOT AVAILABLE <input type="checkbox"/> NOT INSTALLED			TMU: MAP: <input type="checkbox"/> ACTIVATED <input type="checkbox"/> SUPPRESSED <input type="checkbox"/> NOT ACTIVATED <input type="checkbox"/> NOT AVAILABLE <input type="checkbox"/> NOT INSTALLED			
LATERAL (FT/NM):																
6. TRAFFIC VOLUME (# of ACFT):				TRAFFIC COMPLEXITY:				(Low-1 2 3 4 5-High)								
7. WERE ANY INITIATIVES IN PLACE IN RESPONSE TO SECTOR/POSITION VOLUME OR COMPLEXITY?																
<input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, EXPLAIN:																
8. POSSIBLE CONTRIBUTORY FACTORS (CHECK ALL APPLICABLE):																
<input type="checkbox"/> PROCEDURAL <input type="checkbox"/> EQUIPMENT <input type="checkbox"/> COMPRESSION <input type="checkbox"/> TRAFFIC MANAGEMENT <input type="checkbox"/> COMMUNICATION (HEARBACK/READBACK) <input type="checkbox"/> WEATHER <input type="checkbox"/> OTHER																
9. TYPE OF CONTROL:				10. REQUIRED SEPARATION:												
<input type="checkbox"/> RADAR <input type="checkbox"/> TOWER <input type="checkbox"/> (A)FSS				<input type="checkbox"/> FAA DIRECTIVE REQUIRED SEPARATION: / ORDER #/Para:												
				11. WEATHER:												
				<input type="checkbox"/> VMC <input type="checkbox"/> IMC <input type="checkbox"/> DUSK <input type="checkbox"/> DAWN												
12. EMPLOYEE INFORMATION:																
Primary <input type="checkbox"/> 1			Contributory <input type="checkbox"/> 2			Contributory <input type="checkbox"/> 3			Contributory <input type="checkbox"/> 4							
a. TITLE (ATCS/DEV/CIC/SUPVR/MGR/TMC/STMC/SS):																
b. AREA/SECTOR/POSITION WORKING DURING EVENT:																
c. TIME ON POSITION IN AREA/SECTOR/POSITION (IN MINUTES):																
13. AIRCRAFT INFORMATION:																
a. AIRCRAFT#1 ID:				AIRCRAFT#2 ID:				AIRCRAFT#3 ID:				AIRCRAFT#4 ID:				
<input type="checkbox"/> NRP <input type="checkbox"/> NMAC <input type="checkbox"/> TCAS RA				<input type="checkbox"/> NRP <input type="checkbox"/> NMAC <input type="checkbox"/> TCAS RA				<input type="checkbox"/> NRP <input type="checkbox"/> NMAC <input type="checkbox"/> TCAS RA				<input type="checkbox"/> NRP <input type="checkbox"/> NMAC <input type="checkbox"/> TCAS RA				
b. AIRCRAFT MAKE/MODEL/EQUIPMENT SUFFIX:																
c. AIRCRAFT ROUTE OF FLIGHT:																
14. ADDITIONAL INFORMATION:																
15. PERSON MAKING EVENT NOTIFICATION:																
FACILITY ID:				NAME:				LOCAL DATE:				LOCAL TIME:				

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: each calendar year, the Proximity Event (PE) numbers will start with 001 and count up with each subsequent PE</i>
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)