



U.S. Department
Of Transportation

**Federal Aviation
Administration**

7210.56C

Air Traffic Quality Assurance



Distribution: ZAT-721

August 15, 2002

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

RECORD OF CHANGES

DIRECTIVE NO.

7210.56C

CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL	CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL

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

INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

CHAPTER 1. GENERAL

<i>Paragraph</i>	<i>Page</i>
1-1-1. PURPOSE -----	1-1
1-1-2. DISTRIBUTION -----	1-1
1-1-3. CANCELLATION -----	1-1
1-1-4. EXPLANATION OF CHANGES -----	1-1
1-1-5. EFFECTIVE DATE -----	1-4
1-1-6. RELATED PUBLICATIONS -----	1-4
1-1-7. USE OF TERMS -----	1-5
1-1-8. SCOPE -----	1-5

CHAPTER 2. QUALITY ASSURANCE (QA) PROGRAMS

2-1-1. OVERVIEW -----	2-1
2-1-2. RESPONSIBILITIES -----	2-1
2-1-3. PROGRAM CONTENT -----	2-2

CHAPTER 3. TECHNICAL TRAINING DISCUSSIONS

3-1-1. OVERVIEW -----	3-1
3-1-2. DEFINITIONS -----	3-1
3-1-3. RESPONSIBILITIES -----	3-1
3-1-4. DOCUMENTATION -----	3-2

CHAPTER 4. AIR TRAFFIC INCIDENTS

4-1-1. DEFINITIONS -----	4-1
4-1-2. GENERAL HANDLING PROCEDURES -----	4-2
4-1-3. QUALITY ASSURANCE REVIEW (QAR)-----	4-3
4-1-4. EMERGENCIES -----	4-4
4-1-5. FLIGHT ASSISTS -----	4-4
4-1-6. MILITARY FACILITY DEVIATIONS -----	4-5
4-1-7. SPILL OUTS -----	4-5
4-1-8. AIRSPACE INTRUSIONS -----	4-6
4-1-9. INVALID MODE C REPORTING -----	4-6
4-1-10. SURFACE INCIDENTS AND RUNWAY INCURSIONS -----	4-6

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

5-1-1. DEFINITIONS -----	5-1
5-1-2. SUSPECTED EVENT -----	5-2
5-1-3. INITIAL INVESTIGATIONS -----	5-2
5-1-4. MULTIPLE LOSSES OF SEPARATION DURING A SINGLE EVENT -----	5-4
5-1-5. INVESTIGATIVE PROCESS -----	5-4
5-1-6. ATM RESPONSIBILITIES -----	5-5
5-1-7. RECLASSIFICATION -----	5-6
5-1-8. PERFORMANCE BASED ACTIONS -----	5-6
5-1-9. RETURN TO OPERATIONAL DUTY -----	5-7
5-1-10. WHEN THE AIR TRAFFIC MANAGER IS INVOLVED -----	5-8
5-1-11. FOLLOW-UP PERFORMANCE SKILL CHECK-----	5-8
5-1-12. SKILL ENHANCMENT TRAINING -----	5-8
5-1-13. FINAL REPORTS -----	5-8
5-1-14. ENTRIES IN TRAINING AND PROFICIENCY RECORD (FAA FORM 3120-1) -----	5-9
5-1-15. DOCUMENTATION RETENTION -----	5-9
5-1-16. HEADQUARTERS AND AIR TRAFFIC DIVISION ROLES AND RESPONSIBILITIES --	5-10

CHAPTER 6. SEVERITY INDEX

6-1-1.	DEFINITIONS -----	6-1
6-1-2.	SEVERITY CLASSIFICATIONS -----	6-1
6-1-3.	FINAL SEVERITY CLASSIFICATIONS -----	6-1
6-1-4.	RADAR OE SEVERITY INDEX EN-ROUTE CHART -----	6-2
6-1-5.	RADAR OE SEVERITY INDEX TERMINAL AND EN-ROUTE SINGLE SITE CHART ---	6-3

CHAPTER 7. OPERATIONAL ERROR DETECTION PROGRAM (OEDP)

7-1-1.	EN-ROUTE OPERATIONAL ERROR DETECTION PROGRAM (OEDP) -----	7-1
7-1-2.	OEDP AUDIT -----	7-1

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 RECLASSIFICATION REPORT****APPENDIX 7. INSTRUCTIONS FOR FAA FORM 7230-6, FLIGHT ASSIST REPORT****APPENDIX 8. EXAMPLE OF FAA FORM 7230-6, FLIGHT ASSIST REPORT****APPENDIX 9. INTERVIEW STATEMENT AND PARTICIPATING IN POST INCIDENT INVESTIGATIONS****APPENDIX 10. GENERAL REPORTING PROCEDURES****APPENDIX 11. AIR TRAFFIC INCIDENT HANDLING PROCEDURES****APPENDIX 12. DATA RETENTION****APPENDIX 13. OPERATIONAL ERROR/DEVIATION HANDLING PROCEDURES AND RETURN TO
OPERATIONAL DUTY**

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 severity index classification process (See Chapter 6, Severity Index). 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 severity or any operational deviation.

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

(1) All employees found to be primary/contributory to a low severity 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 severity, 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 severity index chart.

ff. 5-1-15. b. Documentation Retention, preliminary and final OE reports that are classified as low severity 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 severity 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 the U.S. Department of Transportation, Office of Inspector General, we have developed a method to determine severity, 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 severity of the event. Each OE that occurs in domestic airspace, under radar control, will be rated and categorized into one of three levels of severity. 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 severity index. 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.

vv. Appendix 13, adds a quick reference page for the handling of operational errors/deviations and the return to duty process.

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.

INTENTIONALLY LEFT BLANK

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.

INTENTIONALLY LEFT BLANK

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:

TTD's 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 employees' first-level supervisor, in a timely manner, of any employees' 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:

(1) 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) A review of any operational error and/or operational deviation the employee may have been involved in since the last TTD.

(3) Any QAR(s) the employee may have been involved in since the last TTD.

(4) Discussion of trends such as OE/OD, facility evaluations, etc.

(5) If no new technical proficiency issues have been identified, a documented discussion shall still take place.

(6) 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/OD's. QAR's 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/OD's.

NOTE:

QAR's are not required for incidents preliminarily identified as OE/OD's. 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 severity 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 QAR's. 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 AAT-200 through the Regional Operations Center (ROC), along with the ATD and the Washington Operations Center (WOC) within 3 hours of any occurrence that results in less than standard separation.

NOTE:

When reporting operational errors/deviations, follow the reporting procedures in paragraph 5-1-3, Initial Investigations.

j. 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.

k. 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 spill outs and forward the following information to AAT-20 through the ATD, ROC, and the WOC with an information copy to Manager, Special Operations Division, ATP-200, via data communications Service B message, within 3 hours of the incident.

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 AAT-20 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. Operational Error: An occurrence attributable to an element of the air traffic system in which:

(1) Less than the applicable separation minima results between two or more aircraft, or between an aircraft and terrain or obstacles (e.g., operations below minimum vectoring altitude (MVA); 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.

(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.

b. Operational Deviation: An occurrence attributable to an element of the air traffic system in which applicable separation minima as referenced in paragraph 5-1-1a, Operational Error was maintained, 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), pre-coordination, 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.

c. Technical Violation: Operational errors that are classified as low severity and all operational deviations. Operational errors that cannot be reviewed by radar data

or a playback tool will be initially classified as a low severity, if all indications are that at least 80% separation minima was maintained. See Chapter 6, Severity Index.

d. Operational Duties: Duties that require an employee to issue or relay an ATC clearance or instruction; make a control decision that will affect coordination; perform a strip marking function or update computer generated information that may be used by an AT controller to make a control decision; or supervise these duties.

e. Operational Error/Operational Deviation Steering Committee: As established by Memorandum of Understanding (MOU) to address national quality assurance issues contained within this order and other matters including, but not limited to, trend analysis, program effectiveness, compliance, and ongoing positive efforts. The committee meets as necessary to review and address quality assurance matters. The steering committee is comprised of two representatives from NATCA and two representatives from AAT-20.

f. Controlled Event: An operational error where the AT employee was aware of the impending conflict and takes corrective action to increase the separation.

g. Uncontrolled Event: An operational error where the AT employee was unaware of the conflict, takes no corrective action and/or became aware of the conflict but did not have enough time to effectively mitigate the loss of separation.

h. Severity Index: A method to determine the gravity, or degree that the separation standard was violated, for operational errors that occur in-flight.

i. OE Causal Factors: The Air Traffic Evaluations and Investigations Staff, AAT-20, in coordination with the Office of Aerospace Medicine's Human Resources Research Division, AAM-500, analyzes, FAA Form 7210-3, Final Operational Error/Deviation Reports to compile statistics and determine trends regarding the causal factors for OE/D's.

Based on that analytical information and as a quality assurance initiative to further reduce the potential for OE/D's system-wide, AAT-20 has identified certain checklist items that, when rated as problematic during evaluations, indicate that the facility's potential for experiencing an OE/D is increased.

5-1-2. SUSPECTED EVENT

a. In order to maintain an effective Air Traffic System, it is imperative that we identify all deficiencies within our system and take appropriate corrective actions necessary to fix any associated problems. Operational errors and deviations are reported for just that reason, so those problems (either systemic or individual) can be corrected to enhance system integrity. The identification of operational errors and deviations without fear of reprisal is an absolute requirement and is the responsibility of all of us who work within our system.

b. Accordingly, it remains Air Traffic Policy that any employee who is aware of any occurrence that may be an operational error, deviation, or air traffic incident (as defined in paragraph 4-1-1, Definitions), immediately report the occurrence to any available supervisor, controller-in-charge (CIC) or management official.

c. Employees' shall verbally provide the preliminary information, of which they have knowledge, when requested by the supervisor, controller-in-charge (CIC) or management official to make an initial determination as to whether an investigation is warranted. This phase is meant only to determine the need of an investigation and is not investigatory. Therefore, Union representation is not required at this time.

5-1-3. INITIAL INVESTIGATIONS

The initial investigation is intended to be fact finding in nature. It has been designed to determine what occurred in the system, to ensure corrective action is initiated to maintain system integrity, and to report significant events to higher levels of management.

NOTE:

There are occasions when it is appropriate for higher levels of management to require further review of a suspected incident, and this further review may result in the discovery of an incident not previously identified.

The operations supervisor or the controller-in-charge when a supervisor is not available, with ATM concurrence, shall determine the validity of suspected OE/OD's and, if valid, shall ensure the following is accomplished:

NOTE:

Other facility personnel shall assist the operations supervisor and/or controller-in-charge in gathering data to conduct the initial investigation, whenever feasible.

a. When information indicates that an OE/OD may have occurred in another facility, promptly advise that facility's operational supervisor-in-charge.

b. Provide relief to any employee who appears to be involved in the incident from all operational duties as

promptly as operational and staffing conditions permit. This action is intended to allow employees' an opportunity to review the voice recordings and prepare draft statements while the circumstances are fresh in their minds. The relief of an employee from operational duty also provides the employee the opportunity to participate in the preliminary investigation. Initial written statements should be completed prior to initial AAT-200 notification.

NOTE:

It may be necessary for involved employees' participating in suspected OE/OD investigations to remain in the facility beyond their scheduled shift in order to complete their statement, be interviewed, and participate in the initial investigation.

c. Gather flight progress strips, weather data, and other pertinent information. If another facility is involved, that facility shall provide the reporting facility's supervisor with all the pertinent data necessary for the timely completion of the preliminary report.

d. Review voice recordings; denote the difference in the system times and, as soon as feasible; prepare a cassette re-recording from the original to be used as a working tape.

e. Review available radar data; denote the difference in the system times, e.g., National Track Analysis Program (NTAP), or Continuous Data Recording (CDR) data, etc. See Appendix 1, Radar Data Processing.

f. Review appropriate computer data and denote the difference in the system times;

(1) Data Analysis Reduction Tool (DART).

(2) Airport Movement Area Safety System (AMASS).

(3) Tower Data Link Services (TDLS).

(4) Pre-departure Clearance (PDC).

(5) User Request Evaluation Tool (URET).

(6) Core Capability Limited Deployment (CCLD).

(7) Controller Pilot Data Link Communications (CPDLC) messages.

(8) Operational and Supportability Improvement System (OASIS) or Model 1.

EXAMPLE –

DART printouts will indicate a chronological sequence of textual CPDLC transactions. Individual CPDLC messages are stored in the Data Link Applications Processor (DLAP) temporary file as a binary encoded message and can be printed out in a text format for review.

NOTE:

Most of these new systems retain data on their individual hard drives, which are automatically deleted after 15 days. It is the ATM's responsibility to advise Airways Facilities, in a timely manner, so they may extract this data onto a storable/retainable electronic media. The pertinent data shall then be retained with the required incident file.

g. Conduct preliminary interviews with involved employees'. Efforts should be made to complete these interview(s) prior to the initial AAT-200 notification.

h. Notify the ATM of the OE/OD.

i. Ensure that FAA Form 7210-2, Preliminary Operational Error/Deviation Investigation, is completed.

NOTE:

When writing the summary, be as clear and concise as possible using who, what, when, where, and how, to describe the entire events. Instructions for completing FAA Form 7210-2 are contained in Appendix 2 and shall include pertinent actions of the pilot(s) and air traffic control leading up to the event and any subsequent action.

j. Notify AAT-200 and the ATD through ROC/WOC by telephone within 3 hours from the time the occurrence is first reported or suspected with the following information/data:

NOTE:

The intent of the time limit is not to preclude a continuation of the preliminary investigation. However, it is intended to ensure that AAT-200 is aware of reported or suspected events within 3 hours of occurrence. If you are unable to meet the 3-hour requirement an extension shall be requested from AAT-200.

(1) A completed FAA Form 7210-2.

(2) En-route; a reduced copy of the NTAP with LST 5 text data shall be faxed to AAT-200.

(3) Terminal; a copy of the CDR plot with the associated separation data shall be faxed to AAT-200.

NOTE:

Once AAT-200 receives this official report of the OE, the AAT-200 specialist will issue a preliminary severity classification in accordance with Chapter 6, Severity Index for return to duty purposes.

k. If an employee is believed to be primary or contributory:

(1) For an operational error/deviation initially classified as low severity by AAT-200, the employee shall be returned to operational duty in accordance with paragraph 5-1-9b, Return to Operational Duty.

(a) In cases where AAT-200 cannot complete a preliminary severity classification within one hour of official notification to AAT-200, and initial indications are that at least 80% of the separation minima was maintained, the employee shall be returned to operational duty as stated above,

(b) In the event the classification later indicates a moderate or high severity, a controller may be required to complete skill enhancement training, if such training is appropriate.

(2) For operational errors classified as moderate or high severity and if the employees' overall documented performance history warrants, he/she shall not be assigned to operational duties until the provisions of paragraph 5-1-9, Return to Operational Duty, are met.

l. If the preliminary investigation reveals that certain employees' first believed to be primary/contributory were not, they may be returned to duty without further action. If these employees' have knowledge of the events, obtain their views and recommendations.

m. If an operational supervisor, by virtue of performing supervisory duties, or a controller while performing CIC duties, is believed to be primary/contributory to a suspected OE/OD, that employee shall not be assigned supervisory/CIC duties until the provisions of paragraph 5-1-9, Return to Operational Duty, are met.

n. When the initial investigation results in a determination of a non-occurrence, retain for 45 days, all data used in the investigation process. For example, pilot/controller statements, record of conversations, original NTAP and CDR plot(s) in an approved electronic format, used in a determination of a non-occurrence, as well as any other pertinent data not otherwise required to be retained. *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.*

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

a. During a single event where multiple losses of standard separation are reported/discovered, and are determined to be the result of employee actions or inaction, each instance of a loss of separation shall be reported individually by completing a separate FAA Form 7210-2 and FAA Form 7210-3. Each form should describe the individual loss of separation, including a reference, if necessary for clarity, to the other related incidents.

b. When a singular failure of a employee to ensure separation between two aircraft (or an aircraft and terrain) that subsequently creates a chain reaction of additional losses of separation between other pairs of aircraft or terrain, the multiple losses of separation shall be considered as a single event only for return to operational duty purposes, performance skill checks, and training actions/plans. If combined, these actions and/or documentation shall be based on the higher of severity classification assigned.

c. The individual separation losses may be combined as one event for the purposes of entries onto FAA Form 3120-1, Section VI.

5-1-5. INVESTIGATIVE PROCESS

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. Certain information, which is necessary to complete FAA Forms 7210-2 and 7210-3, must be obtained from the employees' involved. Since many employees' in the facility, e.g., controllers, air traffic assistants, and supervisors may be knowledgeable of, or a party to the incident, interviews with all possibly involved personnel shall be held. It is imperative that these interviews be conducted in an atmosphere of shared concern as to the events leading to and surrounding the incident. When an interview is conducted, the following shall apply:

(1) As appropriate the Interview Statement shall be read or given to an employee before conducting an interview (see Appendix 9, Interview Statement).

(2) An employee who is a member of a bargaining unit may elect to have a union representative present during the interview, in accordance with the applicable negotiated agreement.

(3) An employee who is interviewed shall be afforded the opportunity to submit written comments and recommendations to the ATM within 5-calendar days of the interview. The comments shall include the employees' name, position function, and location of employment. The employees' signature shall be affixed to the end of the statement and dated. Recommendations should concern corrective actions that can be undertaken to preclude a similar occurrence.

(4) Interviews shall be conducted by supervisory personnel, designated IIC's or the ATM. Investigative team members, other than the involved employees', may participate in the interviews.

(5) Every effort shall be made to conduct interviews during the employees' regularly assigned shift and within the employees' assigned facility.

c. Voice Recordings.

(1) Two certified cassette re-recordings, one marked "Original" and the other marked "Copy", shall be made from the original voice recording that shall include the time track, when available both tapes shall be retained in the OE/OD file. Certification and labeling of these cassettes shall be in accordance with FAA Order 8020.11. Include all communications for a period of 5 minutes before initial contact to 5 minutes after the last contact with each position involved in the OE/OD. When re-recordings are made from digital voice recording system (DVRS) equipment, this period will be from the call file immediately preceding and immediately after the 5 minute before and after requirement.

(2) If the above period exceeds 30 minutes, the ATD manager may approve, for the specific OE/OD, limiting the recording to that period pertinent to the incident.

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) A Union designated representative reasonable opportunity to participate as a member of the investigative team.

(b) Employees' believed to be primary/contributory to the event reasonable opportunity to participate in the investigative process, except during the interview of other employees'.

(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) Pilot deviation.
- (2) Military facility deviation.
- (3) From an operational deviation to an operational error.
- (4) From an operational error to an operational deviation.
- (5) No occurrence.

b. If a reclassification is determined to be appropriate, the ATM shall:

- (1) Complete FAA Form 7210-5, Operational Error/Deviation Reclassification Report.

NOTE:

If a reclassification is from an operational deviation to an operational error or from an operational error to an operational deviation, then reclassify the original incident to a "No Occurrence" and indicate in the supporting documentation the new OE/OD report number.

- (2) Forward FAA Form 7210-5, Operational Error/Deviation Reclassification Report along with the rationale and all necessary supporting documentation, including voice tapes and radar data, to the ATD for review.

c. The ATD shall conduct an initial review of all requests for reclassification. Those they believe have merit shall be reviewed jointly between the ATD and AAT-200. Should the ATD and AAT-200 not agree with the resolution of any request, AAT-20 is the authority to make a final determination. Once AAT-200 verbal approval is obtained, the ATD shall submit FAA Form 7210-5, Operational Error/Deviation Reclassification Report, for all reclassification requests to AAT-20.

d. Facilities shall retain all original forms and supporting investigative data for a period of 2 1/2 years.

5-1-8. PERFORMANCE BASED ACTIONS

a. Performance based action of surface errors, MVA/Obstruction errors, and oceanic/non-radar errors shall be handled in accordance with paragraph 5-1-9c, Return to Operational Duty.

b. When radar data **does not exist** and all indications are that *less* than 80% of the separation minima was maintained, performance based action shall be handled in accordance with paragraph 5-1-9c, Return to Operational Duty.

c. When radar data **does not exist** and all indications are that *at least* 80% of the separation minima was maintained, performance based action shall be handled in accordance with paragraph 5-1-9b, Return to Operational Duty.

d. No controller will be decertified or required to complete remedial training for any operational error(s) classified as a low severity and/or any operational deviation(s). However, skill enhancement training may be administered in accordance with paragraph 5-1-12, Skill Enhancement Training, for errors classified as low severity and are uncontrolled.

e. The number and types of error(s) shall not be the sole determining factor for performance-based actions. Performance based actions shall be based on overall documented performance history.

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

g. Decertification shall not be based solely on involvement in the OE but rather the employee's overall performance history. Operational position decertification and remedial training shall only be used in cases where an employees' documented performance history warrants such action. The employees' supervisor, with ATM concurrence, determines whether to decertify. Decertification may be on one, multiple, or all positions as appropriate for the documented performance deficiencies.

EXAMPLE –

The employee has been determined to be primary in two operational errors within the last 2 1/2 years. The employees' first-line supervisor has had three documented performance discussions (including a TTD) within the past year outlining needed performance improvement with a training plan.

(1) Determine the appropriate actions and training necessary to return the employee fully to duty in consideration of performance deficiencies identified in the above review.

(2) If the decision is not to decertify then skill enhancement training may be administered in accordance with paragraph 5-1-12, Skill Enhancement Training.

(3) If the decision is made to decertify the employee the following actions and training, as a minimum, shall be taken:

(a) A corrective action/recertification plan shall be developed in accordance with FAA Order 3120.4.

(b) This plan shall include, as a minimum, remedial training, which addresses all identified performance issues.

(c) Prior to communicating the above determinations and plans to the employee, the supervisor shall brief the ATM on the issues associated with the OE and obtain the ATM's concurrence for the action plans developed.

(d) Accomplish recertification in accordance with FAA Order 3120.4 for the position(s) that the employee has been decertified.

(e) Upon satisfactory completion of the performance skill check, the employee shall be returned to duty; or

(f) If the employee fails to successfully complete the performance skill check, then the employee shall remain decertified and the provisions of FAA Order 3120.4 applied.

h. When either an operations supervisor (OS) or a controller while performing supervisory/CIC duties, is identified as primary/contributory to an OE/OD, operations CIC duties shall be suspended. Approval from the ATD shall be required before an OS/CIC is authorized to resume supervisory/CIC duties.

5-1-9. RETURN TO OPERATIONAL DUTY

a. The ATM shall remain involved in the post error process, in consultation with the ATD, including a review of the supervisors' determinations made under this paragraph to ensure complete and consistent handling of all incidents.

b. For all operational errors initially classified as a low severity and/or all operational deviations:

(1) The employee(s) determined to be primary/contributory to the error/deviation shall be returned to operational duties as soon as the preliminary investigation activities are completed.

(2) No post OE/OD performance skill check will be completed on any operational position associated with this return to duty, nor will a 30-day follow-up performance skill check be conducted relating to this error/deviation.

(3) The employees' supervisor or designee shall complete the following as soon as feasible after the employee has returned to operational duty:

(a) Conduct an in-depth review with the employee of the their role. This review shall include as a minimum:

1. The events leading up to and surrounding the incident.

2. The procedure or the separation standard involved.

3. Available computer, radar data and voice recording of the incident via SATORI/RAPTOR playback.

4. The training record, including all applicable technical training discussions (TTD's).

c. For all operational errors initially classified as moderate, or high severity, as well as all surface, MVA/Obstruction, oceanic/non-radar errors or at those facilities where radar data is not available and less than 80% of the separation minima was maintained:

(1) Employee(s) determined to be primary/contributory to an operational error and if the employees' performance warrants, shall not be assigned to operational duties until the employees' supervisor or designee shall take the following action:

(a) Conduct an in-depth review of the employees' role in the OE. This review shall include as a minimum:

1. The events leading up to and surrounding the incident.

2. The employees' statement.

3. The procedure or the separation standard involved.

4. Available computer, radar data and voice recording of the incident via SATORI/RAPTOR playback.

5. The training record, including all applicable technical training discussions (TTD's).

6. Verification of currency on the position of operation.

7. Employee involvement in previous OE/ODs during the past 2 1/2 years.

(b) Conduct performance based action in accordance with paragraph 5-1-8g, Performance Based Action.

(c) Conduct performance skill check(s) for those positions on which the employee(s) will be allowed to return to operational duty while training is being provided. This skill check may be accomplished on individual or multiple positions at the discretion of the ATM. If the employee fails to successfully complete the performance skill check, then the employee shall be decertified and the provisions of FAA Order 3120.4 applied.

EXAMPLE-

If an employee was removed from operational duties on the radar departure position, but is to be returned to duty in the tower cab while completing some skill enhancement training for the departure position, a performance skill check(s) would be required in the tower cab function, so as not to unduly delay the return to duty.

(d) As soon as possible after the employee has returned to operational duty, the employees' supervisor or designee shall conduct a performance discussion to include:

1. The results and recommendations from the IIC/investigative team and/or the facility OE review board.

2. Any deficiencies in the employees' performance identified during the investigation of the OE.

5-1-10. WHEN THE AIR TRAFFIC MANAGER IS INVOLVED

If the employee involved in the OE/OD is the ATM, the ATD manager may waive the requirements in paragraph 5-1-9, Return to Operational Duty, temporarily. This waiver shall not exceed 2 weeks, pending the arrival of an ATD designee. Upon arrival, the ATD designee shall serve as the employees' certifying official for the purpose of complying with paragraph 5-1-9, Return to Operational Duty, and 5-1-11, Follow-up Performance Skill Check.

5-1-11. FOLLOW-UP PERFORMANCE SKILL CHECK

The employees' first line supervisor or designee of an employee found to be primary/contributory to an OE of moderate or high severity, as well as all surface errors, MVA/Obstruction errors, and oceanic/non-radar errors shall conduct, as a minimum, a follow-up performance skill check of the employee, within 30 days from the date of return to operational duty. The skill check shall be conducted on a position in the control function involved in the OE. The subsequent technical training discussion (TTD) shall review all training that was administered as

a result of the OE and shall be documented in accordance paragraph 3-1-4, Documentation.

NOTE:

There is no performance skill check or 30-day follow-up performance skill check required with any operational error classified as a low severity or operational deviation.

5-1-12. SKILL ENHANCEMENT TRAINING

a. Skill enhancement training is designed to increase the proficiency of a specialist in a skill 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 of the operational error.

b. For employees' identified as either primary or contributory to an operational error classified as low severity, skill enhancement training may be appropriate only if the operational error has been classified as uncontrolled.

c. Based on the employee(s) performance skill enhancement training may be required for employees' identified as either primary or contributory to an operational error classified as moderate or high severity.

5-1-13. 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 each employee involved and the Principal Union Representative, before completing Part II, Item 69, Facility Manager's Recommendations and Corrective Actions. Employees' may submit comments or recommendations in writing to the ATM within 5-calendar days of receipt. The comments shall include the employees' name, position function, and location of employment, signature and date. 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 employees' 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 employee and union statements) to the ATD, and one copy each to other ATMs and ATDs as required, within 30 administrative workdays of the date the occurrence was reported.

d. When an employee(s) of another facility is involved in an OE/OD, ensure that the employees' supervisor, through that facility ATM, is provided sufficient documentation to determine the appropriate corrective action.

e. Provide involved employee(s) with a copy of the complete report after receipt of Part III from the ATD.

f. Retain the original report in the facility files.

g. Establish a method of follow-up to evaluate the effectiveness of the local recommendations/actions that result from the investigation.

5-1-14. ENTRIES IN TRAINING AND PROFICIENCY RECORD (FAA FORM 3120-1)

When an employees' performance has been determined to contribute to an OE/OD, the following shall be entered into the employees' FAA Form 3120-1:

a. The causal factors as determined by the ATM shall be fully transcribed and endorsed by the employees' first-line supervisor on a separate page in Section VI. This page shall be used for any further reference to the OE/OD and shall indicate the facility's name, the OE/OD report number, and the removal date for the page.

b. Any associated training, remedial and/or skill enhancement shall be logged, in accordance with FAA Order 3120.4, without reference to the OE/OD.

c. Any associated position performance skill checks, including all follow-up performance skill checks (e.g., 30-day) shall be logged in accordance with FAA Order 3120.4, without reference to the OE.

d. Any associated recertification shall be logged, in accordance with FAA Order 3120.4, without reference to the OE.

5-1-15. DOCUMENTATION RETENTION

a. The OE/OD investigation file shall:

(1) Be retained by the reporting facility for 2 1/2 years from the date of the occurrence.

(2) Be identified by a label (maximum size 3"x5") clearly marked "OPERATIONAL ERROR" or "OPERATIONAL DEVIATION," the report number, the incident local date and time, and the local date to be destroyed.

(3) Contain, as a minimum, the original FAA Forms 7210-2 and 7210-3, signed employee personnel statements and/or any similar supporting documents, the two certified re-recordings marked "Original," and "Copy" in accordance with paragraph 5-1-5c, all supporting documentation such as the original NTAP or CDR plot in both printed format and an approved electronic media, as well as all documentation from the supervisor's training plan, performance skill-checks, and the severity index chart from AAT-20.

NOTE:

A facility may elect to store the supporting data, i.e., two certified voice re-recordings, and NTAP on a floppy disk in a separate secured place in lieu of the OE/OD investigation file.

b. Preliminary and final OE reports that are classified as low severity 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.

c. All references to a specific OE/OD shall be removed from the employees' FAA Form 3120-1 and returned to the employee 2 1/2 years after the incident. All references to a specific OE classified as a low severity and/or OD shall be removed from the employees' FAA Form 3120-1 and returned to the employee 12 months after the incident.

5-1-16. HEADQUARTERS AND AIR TRAFFIC DIVISION ROLES AND RESPONSIBILITIES

a. AAT-1 shall be responsible for establishing and maintaining an analytical and investigative element within the headquarters office of Air Traffic Evaluations and Investigations Staff, AAT-20, which shall:

(1) Maintain a central source of OE/OD data.

(2) Review all FAA Forms 7210-3, Final Operational Error/Deviation Report, for the purpose of identifying system wide deficiencies (e.g., human, equipment, and procedural) and based upon these reviews, initiate recommendations for corrective actions to reduce the occurrence of OE/ODs.

(3) Distribute, on a semi-annual basis, an OE/OD Analysis Report. This report shall, as a minimum, identify trends concerning deficiencies specified in paragraph 5-1-14a and be sent to all regions and AT facilities.

(4) Conduct periodic program evaluations to determine the effectiveness and efficiency of this program.

(5) Maintain liaison with the regions, facilities, and other headquarters AT offices and services to provide continuity and follow-up on corrective action recommendations.

(6) Provide policy interpretations concerning the administration of this order.

b. The ATD shall be responsible for establishing an analysis element within the ATD, which shall within 10 administrative workdays after receipt of Parts I and II of FAA Form 7210-3:

(1) Review Parts I and II and complete Part III. Completion of Part III ends the investigation process.

(2) Send copies of the completed FAA Form 7210-3, Parts I, II, and III and all attachments, including employee and union statements, to AAT-20 and the Planning, Information and Analysis Division, ATX-400.

(3) Send a copy of Part III to the appropriate ATM's and other ATD's, when required, and retain the original in either paper or automated form in the regional files.

(4) If the above cannot be completed within the 10-day time period, notify AAT-20 via telephone.

(5) Review all requests to reclassify OE/OD's for completeness of data and to ensure their validity before coordination with AAT-20. Send the approvals in

accordance with paragraph 5-1-7, Reclassification, to AAT-20.

(6) 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.

(7) Provide regional assistance to facilities as required.

(8) Work closely with other ATDs when an OE/OD may involve facilities in different regions and the respective ATMs cannot concur in any phase of their investigations. If 30 administrative workdays have passed since the incident and a decision cannot be reached with the other ATDs, forward all investigative data to AAT-20 for resolution. Until a decision is reached, ensure that all recordings, data and documentation pertaining to the incident are retained.

CHAPTER 6. SEVERITY INDEX

6-1-1. DEFINITIONS

a. Severity Index: a method to determine the gravity, or degree that the separation standard was violated, for operational errors that occur in-flight.

b. Operational Error/Operational Deviation Steering Committee: as established by Memorandum of Understanding (MOU) to address national quality assurance issues contained within this order and other matters including, but not limited to, trend analysis, program effectiveness, compliance, and ongoing positive efforts. The committee meets as necessary to review and address quality assurance matters. The steering committee is comprised of two representatives from NATCA and two representatives from AAT-20.

c. Controlled Event: an operational error where the employee was aware of the impending conflict and takes corrective action to increase the separation.

d. Uncontrolled Event: an operational error where the employee was unaware of the conflict takes no corrective action and/or became aware of the conflict but did not have enough time to effectively mitigate the loss of separation.

e. Technical Violation: Operational errors that are classified as low severity and all operational deviations or operational errors that cannot be reviewed by radar data or a playback tool will be initially classified as a low severity if all indications are that 80% minima was maintained.

6-1-2. SEVERITY CLASSIFICATIONS

a. Airborne operational errors that can be reviewed by a playback tool will be classified by AAT-20 as high, moderate, or low severity.

b. Any dispute regarding the value of any component specific to an event shall be elevated to the OE/OD Steering Committee. The committee will attempt to resolve all disputes within 10 days of elevation. Should the parties not agree, the parties are free to pursue whatever course of action is available to them under the collective bargaining agreement and the Federal Service Labor-Management Relations Statute.

6-1-3. FINAL SEVERITY CLASSIFICATIONS

a. Facility managers shall ensure that radar OE's in domestic airspace are investigated in enough depth to accurately report closest proximity distances. The distances recorded with Operational Error Detection

Program (OEDP) alerts in Air Route Traffic Control Centers (ARTCC) and conflict alert printouts in terminal radar approach controls (TRACON) may not necessarily be the same as those values derived from analysis of radar plots or any playback tool. Consequently, radar extractions through National Track Analysis Program (NTAP) and Continuous Data Recording (CDR) are required to accurately determine those distances. With this in mind, facility personnel are required to supply radar and voice data to AAT-200 as soon as possible. Several methods of transferring extracted radar and voice data are available. An AAT-200 file transfer protocol (FTP://172.22.8.31) secured intranet site has been established so any facility can post digital data for efficient transfer of requested information. Also, an AAT-200 dedicated post office box (address 7-AWA-AAT-210) has been established to receive digital data. Additionally, overnight parcel express is also available and occasionally printed data may be faxed to AAT-200 (202-267-7389 or 9356) that will enable investigators to assess each event. This data needs to be prepared in one of several different forms as listed below. Any question regarding what data and what is the best transfer method should be directed to AAT-200 at 202-267-7010 or 9569.

b. For all En-Route Facilities (ARTCC), prepare a SATORI, with voice, on each OE within 72 business hours of the event and place the SATORI on the AAT-200 SATORI network server, SATORI directory. Name each file using the facility identification, error number, sector number and video map name/number, e.g., ZXX_00_002_r35_35. Each ATD shall ensure facility personnel are proficient at placing SATORI files on the AAT-200 server. If unable to prepare a SATORI in this time frame, forward a chronology, and an NTAP to AAT-200 as soon as possible via the agreed upon method. The NTAP shall comply with FAA Order 7210.56 requirements and shall contain LST 5 data for target coordinates. Target coordinates are necessary for distance calculations when the SATORI playback is not available.

c. For TRACON's, on each OE within 72 business hours of the event, perform a CDR extraction via the PC-Editor using only the time and sensor filters. ARTSIII systems use data classes TD and TG; and ARTSIIIE and IIIE systems CR, TA, TU, and TG data classes. Save the extraction as a single text file. This data shall be posted on the AAT-200 file transfer protocol (FTP://172.22.8.31) secured intranet site within 72 business hours. Voice segments should be prepared in digital form as a WAV file and sent electronically as a voice re-recording with time channel, sent overnight to AAT-200, or recorded over the telephone as requested by AAT-200.

6-1-4. RADAR OE SEVERITY INDEX EN-ROUTE CHART

VERTICAL SEPARATION 1,000 feet required	POINTS	HORIZONTAL SEPARATION* 5-mile separation requirement	POINTS
Less than 500 feet	25	Less than ½ mile	25
500 feet to 599 feet	20	½ mile to 0.999 mile	25
600 feet to 699 feet	16	1 mile to 1.499 miles	24
700 feet to 799 feet	12	1.5 miles to 2 miles	24
800 feet to 899 feet	6	2 miles to 2.499 miles	23
900 feet to 999 feet	2	2.5 miles to 2.999 miles	22
VERTICAL SEPARATION 2,000 feet required	POINTS	3 miles to 3.499 miles	20
Less than 500 feet	25	3.5 miles to 3.999 miles	16
500 feet to 599 feet	25	4 miles to 4.499 miles	10
600 feet to 699 feet	24	4.5 miles to 4.999 miles	5
700 feet to 799 feet	24	CLOSURE RATE	POINTS
800 feet to 899 feet	23	700 knots and greater	10
900 feet to 999 feet	22	300 knots to 699 knots	8
1,000 feet to 1,099 feet	20	100 knots to 299 knots	6
1,100 feet to 1,199 feet	18	Less than 100 knots	4
1,200 feet to 1,299 feet	16	FLIGHT PATHS	POINTS
1,300 feet to 1,399 feet	14	Converging - Opposite Courses	20
1,400 feet to 1,499 feet	12	Converging – Crossing Course	18
1,500 feet to 1,599 feet	10	Same Course	10
1,600 feet to 1,699 feet	8	Diverging/Non-Intersecting	0
1,700 feet to 1,799 feet	6	ATC CONTROL FACTOR	POINTS
1,800 feet to 1,899 feet	4	Uncontrolled	20
1,900 feet to 1,999 feet	2	Controlled with TCAS RA	15
		Controlled with no TCAS RA	4

6-1-5. RADAR OE SEVERITY INDEX TERMINAL AND EN-ROUTE SINGLE SITE CHART

VERTICAL SEPARATION	POINTS	HORIZONTAL SEPARATION*	POINTS
		3-mile separation requirement	
Less than 500 feet	25	Less than ½ mile	25
500 feet to 599 feet	20	½ mile to 0.999 mile	18
600 feet to 699 feet	16	1 mile to 1.499 miles	14
700 feet to 799 feet	12	1.5 miles to 2 miles	10
800 feet to 899 feet	6	2 miles to 2.499 miles	6
900 feet to 999 feet	2	2.5 miles to 2.999 miles	2
CLOSURE RATE	POINTS	HORIZONTAL SEPARATION	POINTS
		2.5-mile requirement	
700 knots and greater	10	Less than ½ mile	25
300 knots to 699 knots	8	½ mile to 0.999 mile	20
100 knots to 299 knots	6	1 mile to 1.499 miles	16
Less than 100 knots	4	1.5 miles to 1.999 miles	10
FLIGHT PATHS	POINTS	2 miles to 2.499 miles	4
Converging - Opposite Courses	20	ATC CONTROL FACTOR	POINTS
Converging – Crossing Course	18	Uncontrolled	20
Same Course	10	Controlled with TCAS RA	15
Diverging/Non-Intersecting	0	Controlled with no TCAS RA	4

* When wake turbulence separation standards are governing, **DO NOT** include any vertical point value. Instead use the appropriate in trail separation index below, as well as other applicable factors.

IN TRAIL SEPARATION	POINTS	IN TRAIL SEPARATION	POINTS
4-mile separation requirement		5-mile separation requirement	
3.499 miles and less	60	4.499 miles and less	60
3.5 miles to 3.999 miles	35	4.5 miles to 4.999 miles	35
		IN TRAIL SEPARATION	POINTS
		6-mile separation requirement	
		5.499 miles and less	60
		5.5 miles to 5.999 miles	35

SEVERITY CLASSIFICATION
90 points and above – HIGH
40-89 points – MODERATE
39 points and below – LOW

INTENTIONALLY LEFT BLANK

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.

INTENTIONALLY LEFT BLANK

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 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.

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 sub-option 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 IIIIE 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.

INTENTIONALLY LEFT BLANK

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?

Blocks 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.

Enter last six digits of the employees Social Security Number (**DO NOT ASK THE EMPLOYEE**), e.g., 55-1234

Item b. Enter Title/certification status, e.g., "CPC/OS/CIC/OM/DEV/TMC/TMS/ATM/SS".

Item c. Enter time on position, e.g., 75 (**in minutes**).

Item d. Enter Area and Sector or Position Designation, e.g., "Area A-R71/D71" or "South Satellite."

Enter **ALL SECTORS/POSITIONS** that were combined to the position at the time of the incident.

Item e. Enter date of last certification, and include Initial or Recertification, e.g., I 1+07 (year+months)

Item f. Enter all previous Errors and/or Deviations within the last 2-1/2 years, including dates. Explain factors identified in previous errors in Summary, Block 21.

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 CIC's 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. Describe the OSIC/CIC actual activity when the incident occurred. Be Specific, e.g., on the phone, coordinating with TMU about the no notice hold into EWR.

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.

INTENTIONALLY LEFT BLANK

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"/> NON-RADAR <input type="checkbox"/> OCEANIC <input type="checkbox"/> TOWER <input type="checkbox"/> AFSS/FSS			<input type="checkbox"/> FAA DIRECTIVE Required Separation Handbook and Paragraph <input type="checkbox"/> LETTER OF AGREEMENT, WITH: FAC. or ORG. Paragraph Required Separation									
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
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?

- Was aircraft able to abort YES NO?
- Did aircraft hold in position: YES NO?
- Proximity when departing aircraft was at taxi speed?
- 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?

- 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):
--	--	-----------	----------------------

INTENTIONALLY LEFT BLANK

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: a Low, Moderate, or High severity, 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

Indicate whether the employee was the primary cause of the incident or contributed to the incident by entering a "P" for primary or "C" for contributory. One employee should be designated as the primary employee responsible for the incident. If a facility is unable to identify one employee as primary, mark all employees' with a "C" and include justification for the designation in Block 70, Facility Manager's Recommendations and Corrective Actions. Do not include employees' who were receiving OJT at the time of the incident.

Block 12 - NUMBER OF PERSONNEL INVOLVED

This is the total number of personnel involved in the error or deviation at the facility that completes this report. This number will be automatically inserted in this block depending on the number of employees' for whom data is provided.

Block 13 - EMPLOYEE IDENTIFIER/FACILITY

EMPLOYEE IDENTIFIER: This letter will be automatically placed in the block for each employee for whom data is provided.

EMPLOYEE FACILITY IDENTIFICATION: Enter the three-letter identifier of the facility where the employee worked at the time of the incident.

EMPLOYEE FACILITY LEVEL: Select the classification level of the facility where the employee worked at the time of the incident. Select from levels 1 through 5.

EMPLOYEE FACILITY TYPE: Select the type of facility where the employee worked at the time of the incident. Select from, "CENTER," "FLIGHT SERVICE," "TOWER," "TRACON," or "OTHER."

Block 14 - EMPLOYEE IDENTIFIER

Enter the employees' identifier.

Block 15 - DATE OF BIRTH

Enter the month, day, and year of the employees' birth.

EXAMPLE- A birth date of September 30, 1949 would be entered as "09/30/1949."

Block 16 - SOCIAL SECURITY NUMBER

Enter the last SIX numbers of the employees' social security number.

Block 17 - INDICATE THE PERFORMANCE LEVEL OF THE EMPLOYEE

Select the position or the performance level of the employee at the time of the incident. Select "DEVELOPMENTAL," "CPC," "SUPERVISOR," "STAFF SPECIALIST," or "OTHER." If "CPC" is selected, enter, as of the date of the incident, how many years and months the employee has been a CPC in the facility where the incident occurred.

EXAMPLE- 5 years and 8 months would be entered as "05-08."

Block 18 - LAST DATE OF CERTIFICATION OR RECERTIFICATION ON POSITION

DATE: Enter the most recent of either the date that the employee was initially certified or the last date that the employee was recertified on the position that he/she was staffing at the time of the incident.

EXAMPLE- A date of May 25, 1993 would be entered as "05/25/1993."

CERTIFICATION: Indicate whether the date entered is the initial certification date by selecting "I" or recertification by selecting "R."

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

Select "Yes" or "No" to indicate whether the employee has received training within the 12 months prior to the incident that is relevant to the incident. If "Yes" is selected, list the type and date of the training in the provided text box.

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

Select "Yes" or "No" to indicate if a medical certification issue was related to the incident.

If "Yes" is selected, provide a complete explanation of how the medical certification issue related to the incident in Block 65, Summary of Incident.

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

EXAMPLE- When the employee is on an alternate work schedule always enter "AWS" before describing the shift. For example, an AWS shift of eight 9-hour days and one 8-hour day per pay period would be entered as "AWS 5-4/9." An AWS shift working four 10-hour days per week would be entered as "AWS 4/10."

When the employee works 8-hour shifts; 2 days, 2 swings, 1 mid per week, enter "2-2-1." Explain any other schedules such as: "8 hour day shifts," "8 hour mid shifts," or "No standard operational work schedule, person on detail."

Supervisors, managers, or staff specialists who are maintaining currency but not working traffic full time should be described as: "First-level supervisor/area manager/air traffic manager/staff specialist maintaining currency."

Block 22 - CURRENT AND PREVIOUS SHIFT

Enter local times using the 24-hour clock.
PREVIOUS SHIFT: Enter the sign-in and sign-out times of the employee for the shift immediately prior to the shift on which the incident occurred. Enter these times ONLY if that shift ended less than 36 hours from the beginning of the shift on which the incident occurred. If the previous shift ended more than 36 hours before the shift on which the incident occurred, enter "N/A."

CURRENT SHIFT: Enter the sign-in and sign-out times for the employee for the shift on which the incident occurred.

Block 23 - AREA OF SPECIALIZATION

Enter the employees' area of specialization.

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

Block 24 - SECTOR OR POSITION

Enter the sector or position that the employee was staffing at the time of the incident.

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

Block 25 - TIME ON POSITION

Enter the amount of time in minutes the employee had been on the position at the time of the incident.

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

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

EXAMPLE- If the hand-off position of Sector 34 was combined at the radar position of Sector 34 that was being worked by the primary controller, enter "H34." If the North Feeder radar position was combined at the South Feeder radar position, enter "North Feeder Radar." A midnight watch would probably have several sectors/positions combined.

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 position being worked by the primary controller.

EXAMPLE- If D34 was staffed at the time of incident when the primary controller was working R34, enter "D34." If the handoff position for Arrival Radar 1 was staffed, enter "Handoff Arrival Radar 1."

Block 28 - POSITION FUNCTION

Select the employees' position function at the time of the incident from the following choices. Area Supervisor, Radar, Handoff, Radar Associate, Local Control, Ground Control, Clearance Delivery, Departure Position, Arrival Position, Air Traffic Assistant, Traffic Management, Flight Data, or Other.

If "Other" is selected, enter that function in the appropriate space.

EXAMPLE- If the employee involved is an Area Supervisor but he/she was working a radar position at the time of the incident, enter an "R." If the employee was a staff specialist working the Controller-In-Charge position, enter "CIC."

*** Block 29 - DID THE EMPLOYEE REQUEST ASSISTANCE PRIOR TO THE INCIDENT?**

Select "Yes" or "No" to indicate if the employee requested assistance prior to the incident. 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 - WAS THE EMPLOYEE AWARE THAT AN OPERATIONAL ERROR/DEVIATION WAS DEVELOPING?**

Select "Yes" or "No" to indicate if the employee was aware that an OE/OD was developing. In either case, provide an explanation in Block 65. If "Yes" is selected, explain the surrounding circumstances in relation to when the employee was aware. If "No" is selected, explain why the employee was unaware.

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

Select "Yes" or "No" to indicate if the employee contemplated taking any corrective actions regarding the incident. In either case, provide an explanation in 65.

If "Yes" is selected, explain what the employee thought of doing to correct the situation. If "No" is selected, explain why the employee did not think of taking corrective action.

*** Block 32 - DID THE EMPLOYEE ATTEMPT TO TAKE CORRECTIVE ACTION?**

Enter "Yes" or "No" to indicate if the employee 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 - EMPLOYEE WAS ALERTED TO THE INCIDENT BY

Enter the first source that alerted the employee 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 EMPLOYEE BECAME AWARE OF THE INCIDENT

Using the 24-hour clock, indicate the local date and time the employee became occurred even if it was not clear at the time that the incident was an error or deviation.

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

This block applies only to ARTCC's. 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 - NAME THE OSIC/CIC ASSIGNED AT THE TIME OF THE INCIDENT

Enter the last name, first name, middle initial and last six numbers of social security number of the employee assigned as the Operational Supervisor-in-Charge (OSIC)/CIC of the operational area, at the time of the incident.

*** 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?

This block should be completed using input from the OSIC/CIC assigned to the operational area, at the time of the incident.

Select "Yes" or "No" to indicate if assistance that is normally provided by the OSIC/CIC could have helped the employee to prevent the incident.

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

Select "Yes" or "No" to indicate if the assigned OSIC/CIC provided assistance to the employee that was pertinent to the incident. If "Yes" is selected, explain in Block 65 what assistance was provided. If "No" is selected, explain in Block 65 why assistance pertinent to the incident was not provided by the OSIC/CIC.

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 controller's task; 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 OPERATED BY THE CONTROLLER (S) REPORTED AS FUNCTIONING UNSATISFACTORILY BEFORE THE INCIDENT?**

Select "Yes" or "No" to indicate if any problems with pertinent equipment were reported by the controller 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 the pertinent actions of all those involved (e.g. controllers by position, supervisors, aircraft, etc.). It should be apparent what actions (of lack of) contributed to or caused the incident. Include any explanations necessary from previous blocks.

Refer to aircraft using their call signs and to individuals by position or title, as appropriate. For example, use "UAL1065" instead of "Aircraft #1." Use "R34" or "Local Control" instead of "Controller A." The summary should be complete so that the reader does not have to refer back to other blocks for information on controller 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. Explain why the controller did not maintain separation.

EXAMPLE-

a. The controller may have been focusing on another situation and when he/she noticed the potential incident it was too late to maintain separation.

b. The controller issued a clearance but by the time he/she noticed the aircraft was not complying fast enough it was too late to maintain separation.

c. A readback/hearback error occurred and the controller did not have enough time to issue the correct clearances to maintain separation.

d. The controller thought the heading/climb/descent he/she gave an aircraft would maintain separation but by the time it was apparent that separation would be lost, it was too late for more effective instructions to take effect.

e. Equipment failure did not allow the controller to issue the necessary timely instructions.

f. An authorized local/regional/national procedure was followed correctly but an OE/OD still resulted.

NOTE:

A phrase such as "The controller failed to establish vertical separation before lateral separation was lost" is not appropriate. It is a factual statement but it does not describe the specific circumstances surrounding the incident or why the controller failed to maintain separation.

Block 65 - SUMMARY OF INCIDENT EXAMPLE

AAL1045, B757, was eastbound at FL290 from over LIN direct OAL en route to JFK and in communication with R25. UAL432, DC10, was westbound at FL350 from approximately over OAL direct MOD, en route to SFO, and in communication with R12. The aircraft were on approximately opposite direction courses.

At 0923:15, R12 accepted the hand-off on AAL1045 and requested D12 to coordinate with Sector 25 to assign AAL1045 a heading of 120 degrees and to climb the aircraft to FL370. D12 then contacted R25 with the requests and R25 issued AAL1045 the coordinated clearances. The pilot acknowledged both the heading and the altitude clearance.

At 0924:05 the R25 controller requested help at the sector due to traffic volume (15 aircraft and increasing) and flow restrictions, due to weather, requiring a 20 mile-in-trail restriction for aircraft landing SFO. The OSIC had a controller working on the "D" position at Sector 25 within 3 minutes of the request.

At 0925:30, R25 accepted the hand-off on UAL432, which was converging with AAL1045. The DART data showed that AAL1045's altitude was FL316. The aircraft were 72 miles apart.

At 0927:50, the R25 controller generated a HALO around UAL432 radar target and, simultaneously, the Conflict Alert activated. Three seconds later UAL432 made initial contact with R25, at FL350. Lateral separation was then 39 miles with AAL1045 climbing through FL342. Immediately following UAL432's initial contact, the R25 controller issued UAL432 a 20-degree right turn. The pilot acknowledged.

At 0928:05, the R25 controller issued AAL1045 a right turn to heading 140 degrees and asked the pilot to "give me a good rate of climb". The pilot acknowledged. The R25 controller then returned to UAL432 and issued a right turn to 310 degrees and the pilot acknowledged. The R25 controller thought that the vectors given were adequate to maintain lateral separation so that AAL1045 could continue to climb through the altitude of UAL432. Approximately 20 seconds passed and at 0928:45 the R25 controller asked UAL432 if he had started his turn. The pilot's response was, "We see the traffic out in front of us." The R25 controller stated that he needed UAL432 to start the turn "immediately." The pilot stated that he was turning and passing through "three zero". Though not yet evident to the R25 controller, the turn had been started at or before 09:28:40, as indicated by NTAP data.

At 0929:04 separation was lost. The NTAP indicated 3.9 miles lateral and 200 feet vertical separation as the closest proximity.

Although the R25 controller accepted a handoff on UAL432 knowing of the route convergence with AAL1045, he thought that AAL1045's initial vector and the 310 degrees heading he assigned to UAL432 would maintain separation. He could have amended AAL1045's altitude to FL330 during the climb to maintain vertical separation or could have given sharper turns to both aircraft to achieve lateral separation. By the time he recognized that the vectors were not working, it was too late to maintain separation.

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 an "/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 (ies) 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

Under each column designated for a specific employee, select any box so that an "X" appears, when the description identifies a causal factor of the incident.

EXAMPLE- If overlapping data blocks were a causal factor of the incident and it was employee "A" who was associated with the overlapping data blocks, select the box in column "A" under section B (1) entitled "Overlapping data blocks." If a causal factor of the incident was the employees' failure to coordinate correctly with a position within the same sector, select the box 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 APREQ's, 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 involved employees' or 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 an "/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 an "/s/" in the signature space.

APPENDIX 5. EXAMPLE OF FAA FORM 7210-3,
FINAL OPERATIONAL ERROR/DEVIATION REPORT

Final Operational Error/Deviation Report

Report Number _____

PART I. INVESTIGATIVE DATA

1. Date and time of incident: MM/DD/YYYY	Time (Local)
---	--------------

2. Responsible facility: Classification level:	3. Severity Index: points <input type="checkbox"/> Low <input type="checkbox"/> Controlled w/ no TCAS <input type="checkbox"/> Converging, Opposite Courses <input type="checkbox"/> Moderate <input type="checkbox"/> Controlled with TCAS RA <input type="checkbox"/> Converging, Crossing Courses <input type="checkbox"/> High <input type="checkbox"/> Uncontrolled <input type="checkbox"/> Same Course <input type="checkbox"/> Diverging/Non-intersecting Courses
---	---

4. Was weather a factor in the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, explain in the incident summary.)	5. Altitude/flight level of incident:
---	---------------------------------------

6. Type of airspace: <input type="checkbox"/> Class A <input type="checkbox"/> Class E <input type="checkbox"/> Class B <input type="checkbox"/> Class G <input type="checkbox"/> Class C <input type="checkbox"/> Oceanic <input type="checkbox"/> Class D <input type="checkbox"/> Airport surface <input type="checkbox"/> Other	7. Location of incident: Fix Intersection Direction Runway Distance Taxiway Latitude Longitude
--	---

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 controller had control responsibility for 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. Employees' facility:		
		3-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"/> CPC	18. Last date of certification or recertification on position: ion	19. Has training been received within the last 12 months that is relevant to the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, list the type and the date of that training in this block:
---	---	--

YY-MM

Final Operational Error/Deviation Report

Report Number _____

<p>20. Is a medical certification issue related to the incident?</p> <p style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </p> <p>(If yes, explain in the incident summary.)</p>	<p>21. Identify and describe the type of work schedule being worked at the time of the</p>	<p>22. Current and previous shift</p> <p>Previous shift Sign in Sign out</p> <p>Current shift Sign in Sign out</p>	
<p>23. Area of specialization:</p>	<p>24. Sector or position:</p> <p style="text-align: center;">Number and Name</p>	<p>25. Time on position:</p> <p style="text-align: center;">Minutes</p>	<p>26. What sectors or position were combined at the position being staffed by the controller at the time of the incident?</p>
<p>27. Which associated positions were staffed at the time of the incident?</p>			
<p>28. Position function:</p> <p> <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"/> Area Supervisor <input type="checkbox"/> Air Traffic Assistant <input type="checkbox"/> Traffic Management <input type="checkbox"/> Tracker Other: </p>			
<p>29. Did the employee request assistance prior to the incident?</p> <p style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </p> <p>(If yes, provide explanation in the incident summary.)</p>	<p>30. Was the employee aware that an operational error/deviation was developing?</p> <p style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </p> <p>(Provide explanation in the incident summary.)</p>		
<p>31. Did the employee contemplate taking corrective action?</p> <p style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </p> <p>(Provide explanation in the incident summary.)</p>	<p>32. Did the employee attempt to take corrective action?</p> <p style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </p> <p>(Provide explanation in the incident summary.)</p>		
<p>33. Employee was alerted to the incident by:</p> <p> Equipment: Personnel: Non-facility personnel: Other: </p> <p> <input type="checkbox"/> Conflict alert <input type="checkbox"/> Self-identified <input type="checkbox"/> Pilot <input type="checkbox"/> MSAW/EMSAW <input type="checkbox"/> Facility personnel <input type="checkbox"/> Another facility </p>			
<p>34. Date and time employee became aware of the incident:</p> <p style="text-align: center;">MM/DD/YYYY Time (local)</p>	<p>35. Was the Distance Reference Indicator (i.e., J-Ring) being used?</p> <p style="text-align: right;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </p>		
<p>36. Were there any distractions or environmental conditions that may have influenced the incident?</p> <p style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, provide explanation in the incident summary.) </p> <p><small>(i.e., distractions: construction, equipment installation, presence of visitors, loud or boisterous coworkers, equipment malfunction, and extraneous conversation w/coworkers; environmental: ambient air, work area layout, temperature, noise, and lighting.)</small></p>			

Final Operational Error/Deviation Report

Employee: _____ Continuation Page 2

11. Enter P for primary or C for Contributory:	12. Number of personnel involved:	13. Employees' facility: 3 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"/> CPC <input type="checkbox"/> Supervisor <input type="checkbox"/> Staff Specialist <input type="checkbox"/> Other If CPC, how long since CPC 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 been received within the last 12 months that is relevant to the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, list the type and the date of That training in this block.
20. Is a medical certification issue related to the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, explain in the incident summary.)	21. Identify and describe the type of work schedule being worked at the time of the incident.		22. Current and previous shift 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 by the primary controller at the time of the incident?
27. Which other positions at the sector were staffed at the time of the incident?			
28. Position function: <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"/> Area Supervisor <input type="checkbox"/> Air Traffic Assistant <input type="checkbox"/> Traffic Management <input type="checkbox"/> Tracker Other: _____			

Final Operational Error/Deviation Report

Report Number _____

Employee: _____ Continuation Page 2

<p>29. Did the employee request assistance prior to the occurrence?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>(If yes, provide explanation in the incident summary.)</p>	<p>30. Was the employee aware that an operational error/deviation was developing?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>(Provide explanation in the incident summary.)</p>												
<p>31. Did the employee contemplate taking corrective action?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>(Provide explanation in the incident summary.)</p>	<p>32. Did the employee attempt to take corrective action?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>(Provide explanation in the incident summary.)</p>												
<p>33. Employee was alerted to the incident by:</p> <table style="width:100%; border: none;"> <tr> <td style="width:25%;">Equipment:</td> <td style="width:25%;">Personnel:</td> <td style="width:25%;">Non-facility personnel:</td> <td style="width:25%;">Other:</td> </tr> <tr> <td><input type="checkbox"/> Conflict alert</td> <td><input type="checkbox"/> Self-identified</td> <td><input type="checkbox"/> Pilot</td> <td></td> </tr> <tr> <td><input type="checkbox"/> MSAW/EMSAW</td> <td><input type="checkbox"/> Facility personnel</td> <td><input type="checkbox"/> Another facility</td> <td></td> </tr> </table>		Equipment:	Personnel:	Non-facility personnel:	Other:	<input type="checkbox"/> Conflict alert	<input type="checkbox"/> Self-identified	<input type="checkbox"/> Pilot		<input type="checkbox"/> MSAW/EMSAW	<input type="checkbox"/> Facility personnel	<input type="checkbox"/> Another facility	
Equipment:	Personnel:	Non-facility personnel:	Other:										
<input type="checkbox"/> Conflict alert	<input type="checkbox"/> Self-identified	<input type="checkbox"/> Pilot											
<input type="checkbox"/> MSAW/EMSAW	<input type="checkbox"/> Facility personnel	<input type="checkbox"/> Another facility											
<p>34. Date and time employee became aware of the incident:</p> <p style="text-align: center;">MM/DD/YYYY Time (local)</p>	<p>35. Was the Distance Reference Indicator (i.e., J-Ring) being used?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>												
<p>36. Were there any distractions or environmental conditions that may have influenced the incident?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>(If yes, provide explanation in the incident summary.)</p> <p><small>(i.e., distractions: construction, equipment installation, presence of visitors, loud or boisterous coworkers, equipment malfunction, and extraneous conversation w/coworkers; environmental: ambient air, work area layout, temperature, noise, and lighting.)</small></p>													

Final Operational Error/Deviation Report

Report Number _____

37. Name the OSIC/CIC assigned at the time of the incident: <div style="text-align: center; margin-bottom: 10px;">Enter A for OSIC Enter C for CIC</div> <div style="display: flex; justify-content: space-between;"> Last name First name MI SSN (Last 6 digits) </div>	38. Was the assigned OSIC/CIC present in the operational area at the time of the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No										
39. Did the employee require OSIC/CIC assistance prior to the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No	40. Did the assigned OSIC/CIC provide assistance? <input type="checkbox"/> Yes <input type="checkbox"/> No <small>(Provide explanation in the incident summary.)</small>										
41. If sectors were combined, did the OSIC/CIC approve the combination? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not combined <input type="checkbox"/> N/A	42. If positions were combined, did the OSIC/CIC approve the combination? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Combined										
43. In what activity was the assigned OSIC/CIC engaged at the time of the incident? <input type="checkbox"/> General Supervision <input type="checkbox"/> Administering training <input type="checkbox"/> Direct operational supervision <input type="checkbox"/> Receiving training <input type="checkbox"/> Working a position of operation <input type="checkbox"/> Other	44. Was the OSIC/CIC certified in the area of specialization where the incident took place? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <small>(If no, explain here)</small>										
45. Traffic complexity <div style="text-align: center;"> <table style="margin: auto; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 20px;">1</td> <td style="text-align: center; width: 20px;">2</td> <td style="text-align: center; width: 20px;">3</td> <td style="text-align: center; width: 20px;">4</td> <td style="text-align: center; width: 20px;">5</td> </tr> <tr> <td style="text-align: center;">Low</td> <td></td> <td style="text-align: center;">Avg</td> <td></td> <td style="text-align: center;">High</td> </tr> </table> </div>	1	2	3	4	5	Low		Avg		High	46. Indicate which factor(s) were associated with traffic complexity. <input type="checkbox"/> Weather <input type="checkbox"/> Runway configuration <input type="checkbox"/> Terrain <input type="checkbox"/> Runway condition <input type="checkbox"/> Airspace configuration <input type="checkbox"/> Flow control <input type="checkbox"/> Number of aircraft <input type="checkbox"/> Special event <input type="checkbox"/> Experience level <input type="checkbox"/> Other <input type="checkbox"/> Emergency situation
1	2	3	4	5							
Low		Avg		High							
47. Type of Control Provided <input type="checkbox"/> Radar <input type="checkbox"/> Tower <input type="checkbox"/> Oceanic <input type="checkbox"/> Nonradar	48. Required separation was by: <input type="checkbox"/> FAA Order <input type="checkbox"/> Facility Letter of Agreement (LOA) or Directive <div style="display: flex; justify-content: space-between; margin-top: 10px;"> FAA Order Facility LOA/Directive </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> Paragraph Paragraph </div>										
49. Were any deficient procedures noted as a result of the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No <small>(If yes, explain here)</small>	50. Were any special procedures in effect at the time of the incident? (e.g. Traffic Management Program) <input type="checkbox"/> Yes <input type="checkbox"/> No <small>(If yes, explain here)</small>										

Final Operational Error/Deviation Report

Report Number _____

(Complete additional sections if more than two aircraft are involved)

51. Number of aircraft involved in the incident:						
	Aircraft No. 1			Aircraft No. 2		
52. Identification						
53. Prefix/type/suffix						
54. Flight profile or vehicle position 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"/> 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"/> 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"/> 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"/> Climbing	<input type="checkbox"/> Holding in position on runway	<input type="checkbox"/> Other	<input type="checkbox"/> Other
	<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"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> TCAS	<input type="checkbox"/> Unknown	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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 operated by the controller(s) reported as functioning unsatisfactorily before the incident?		
<input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, explain in the incident summary)				<input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, explain in the incident summary)		
62. System(s) in use:						
<input type="checkbox"/> Narrowband	<input type="checkbox"/> ASR-9	<input type="checkbox"/> ASDE II	<input type="checkbox"/> STARS	<input type="checkbox"/> ARTS IIIA		
<input type="checkbox"/> Broadband	<input type="checkbox"/> ASR-11	<input type="checkbox"/> ASDE III	<input type="checkbox"/> STARS on ARTS	<input type="checkbox"/> ARTS IIE		
<input type="checkbox"/> DARC	<input type="checkbox"/> URET	<input type="checkbox"/> AMASS	<input type="checkbox"/> ACDs on ARTS	<input type="checkbox"/> ARTS IIIE		
<input type="checkbox"/> CENRAP	<input type="checkbox"/> OASIS	<input type="checkbox"/> D-BRITE	<input type="checkbox"/> DSR	<input type="checkbox"/> EARTS		
<input type="checkbox"/> Mode S	<input type="checkbox"/> Model1	<input type="checkbox"/> BRITE IV	<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		

Final Operational Error/Deviation Report

Report Number _____

Additional aircraft sections		
51. Number of aircraft involved in the incident:		
	Aircraft No. 3	Aircraft No. 4
52. Identification		
53. Prefix/type/suffix		
54. Flight profile or vehicle Position at time of Incident	<input type="checkbox"/> Descending <input type="checkbox"/> Making approach <input type="checkbox"/> Touching down <input type="checkbox"/> Radar vector <input type="checkbox"/> Level flight <input type="checkbox"/> Takeoff 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"/> Other	<input type="checkbox"/> Descending <input type="checkbox"/> Making approach <input type="checkbox"/> Touching down <input type="checkbox"/> Radar vector <input type="checkbox"/> Level flight <input type="checkbox"/> Takeoff 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"/> 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

(Complete additional sections if more than two aircraft are involved)		
51. Number of aircraft involved in the incident:		
	Aircraft No. 5	Aircraft No. 6
52. Identification		
53. Prefix/type/suffix		
54. Flight profile or vehicle Position at time of Incident	<input type="checkbox"/> Descending <input type="checkbox"/> Making approach <input type="checkbox"/> Touching down <input type="checkbox"/> Radar vector <input type="checkbox"/> Level flight <input type="checkbox"/> Takeoff 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"/> Other	<input type="checkbox"/> Descending <input type="checkbox"/> Making approach <input type="checkbox"/> Touching down <input type="checkbox"/> Radar vector <input type="checkbox"/> Level flight <input type="checkbox"/> Takeoff 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"/> 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 _____

65. SUMMARY OF INCIDENT (continued from page 5)

<p>65. SUMMARY OF INCIDENT (continued from page 5)</p>

66. INVESTIGATORS

Date	Typed/Printed Name	Signature
MM/DD/YYYY	First/Last Name	Investigator-in-Charge
MM/DD/YYYY	First/Last Name	Team Member
MM/DD/YYYY	First/Last Name	Team Member
MM/DD/YYYY	First/Last Name	Team Member
MM/DD/YYYY	First/Last Name	Team Member
MM/DD/YYYY	First/Last Name	Team Member
MM/DD/YYYY	First/Last Name	Team Member
MM/DD/YYYY	First/Last Name	Team Member

Final Operational Error/Deviation Report

Report Number _____

65. SUMMARY OF INCIDENT (continued from page 6)

Final Operational Error/Deviation Report	Report Number _____
--	---------------------

Part II. FACILITY MANAGER ACTION

67. Select the category of the operational error/deviation. (more than one category may be possible)

Procedural
 Equipment
 ATCS
 Manager/Supervisor/Other Personnel

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

Final Operational Error/Deviation Report

Report Number _____

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

Final Operational Error/Deviation Report

Report Number _____

69. FACILITY MANAGER'S RECOMMENDATIONS AND CORRECTIVE ACTIONS

[Empty area for Facility Manager's Recommendations and Corrective Actions]

Date	Typed/Printed Name of Facility Manager	Signature
_____	_____	_____

Final Operational Error/Deviation Report

Report Number _____

69. FACILITY MANAGER'S RECOMMENDATIONS AND CORRECTIVE ACTIONS (continued from page 9)

[Empty box for Facility Manager's Recommendations and Corrective Actions]

Final Operational Error/Deviation Report

Report Number _____

**Part III. AIR TRAFFIC DIVISION
MANAGER**

70. AIR TRAFFIC DIVISION MANGER'S CONCLUSIONS/RECOMMENDATIONS

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

Date	Typed/Printed Name of Division Manager	Signature
_____	_____	_____

Final Operational Error/Deviation Report

Report Number _____

70. AIR TRAFFIC DIVISION MANGER'S CONCLUSIONS/RECOMMENDATIONS (continued from page 10)

[Empty box for conclusions and recommendations]

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

INTENTIONALLY LEFT BLANK

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 (*).

INTENTIONALLY LEFT BLANK

**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					

INTENTIONALLY LEFT BLANK

APPENDIX 9.
INTERVIEW STATEMENT AND PARTICIPATING IN POST INCIDENT
INVESTIGATIONS

Human Resource Policy Manual (HRPM)

Human Resource Management (AHR)

STANDARDS OF CONDUCT

ER-4.1

This version effective: August 11, 2000 unless otherwise specified for a collective bargaining unit

Background information: This chapter replaces chapters 1, 2, 3, and 5 of FAPM LETTER 2635. However, FAPM 2635 will remain in effect for bargaining unit employees/positions where any applicable collective bargaining agreement contains provisions that conflict with this chapter and/or until all bargaining obligations with individual collective bargaining units have been satisfied.

9. GIVING STATEMENTS AND/OR TESTIMONY:

a. It is the duty and requirement of every employee to give, orally and/or in writing as directed, to any supervisor or DOT official conducting an investigation, inquiry or hearing in the interest of the agency, complete and truthful information and testimony pertaining to all matters in which queried.

b. When directed by the Administrator (or his/her authorized representative), an employee shall take an oath or make an affirmation about his/her testimony or written statement before an agent authorized by law to administer oaths, and the employee shall, if requested, sign his/her name to the transcript of testimony, affidavit or written statement which the employee provided. No employee may refuse to testify or provide information pertinent to matters under investigation or inquiry.

c. All employees must give complete and truthful information in response to requests received from Congress, the General Accounting Office, the Office of the Inspector General, the Office of Personnel Management or other duly authorized investigative bodies, regarding matters under their jurisdiction. It is FAA policy to cooperate with such bodies in the public interest. Employees must notify their supervisor, or their second-level supervisor if the inquiry concerns the first-line supervisor, of any such request.

INTENTIONALLY LEFT BLANK

APPENDIX 10. GENERAL REPORTING PROCEDURES

Event	Time Frame ¹	Reference	Form
Operational Error or Deviation	Significant ² : AAT-200 Immediately Other: No later than 3 hours unless an extension is granted by AAT-200	FAA Order 7210.56 Par 5-1-3i	FAA Form 7210-2
Aircraft Accident	Significant: AAT-200 Immediately Other: As soon as possible but not later than 2 hours	FAA Order 8020.11, Par 64	FAA Form 8020-3 and 8020-9
Near Mid-Air Collision	Significant: AAT-200 Immediately Otherwise: 3 hours	FAA Order 8020.11 Par 81	FAA Form 8020-21
Pilot Deviations or Airspace Intrusions	Significant: AAT-200 Immediately Loss of separation: 3 hours Other: 3 hours	FAA Order 8020.11, Par 84	FAA Form 8020-17
Vehicle and Pedestrian Deviations	Significant: AAT-200 Immediately Loss of separation: 3 hours Other: 3 hours	FAA Order 8020.11 Par 86	FAA Form 8020-24
Emergency	Significant: AAT-200 Immediately Loss of separation: 3 hours Other: 3 hours	FAA Order 7210.56, Par 4-1-4	FAA Form 8020-11
Flight Assist	Significant: ATD Immediately Other: 3 hours	FAA Order 7210.56, Par 4-1-5	FAA Form 8020-11 or 8020-17 as appropriate
Military Facility Deviation	Significant: AAT-200 Immediately Other: 3 hours	FAA Order 7210.56, Par 4-1-6	FAA Form 8020-11
Spill Outs	Significant: AAT-200 Immediately Loss of separation: 3 hours as a Pilot Deviation. Other: 3 hours	FAA Order 7210.56, Par 4-1-7	FAA Form 8020-11

Significant Events: a loss of separation, runway incursion, incident, accident, emergency or other event that includes an air carrier, commuter, air taxi, an aircraft carrying members of Congress, a prominent person(s), or the incident may or has become newsworthy. Please keep in mind when in doubt, contact the WOC, they will conference you with the AAT-200 duty specialist for guidance.

¹ All Notifications to AAT-200 shall be made through the WOC via the ROC.

² Significant: involvement of an Air Carrier, Air Taxi, prominent persons and/or may become newsworthy.

INTENTIONALLY LEFT BLANK

APPENDIX 11. AIR TRAFFIC INCIDENT HANDLING PROCEDURES

1. Operational deviations: for all operational deviations a completed FAA Form 7210-2 shall be faxed and a conference call through the WOC with the AT facility(s), ATD and AAT-200 within 3 hours of the event, during normal business hours. During after hour's only significant deviations (see below for definition), deviations involving the NY or DC Metro facilities (because they are very news worthy) or individuals with multiple errors or deviations within the past 2 1/2 years shall be conferenced.

2. Operational errors: for all operational errors; a completed FAA Form 7210-2 shall be faxed and a conference call shall be made through the WOC with the AT facility(s), ATD and AAT-200 on all errors. Additionally, a reduced copy of the NTAP, copy of the LST 5 data for en-route errors or an enlarged copy of the CDR plot with the associated text including A/B, B/A separation for terminal errors, shall be attached to the OE/OD report and faxed to the WOC (please ensure that the data and report is legible). AAT-200, the AT facility and ATD SHALL be conferenced within 3 hours of the event unless AAT-200 approves an extension. All en-route facility's shall prepare and post a SATORI on AAT-200's system and all terminals shall prepare and post on AAT-200's web site (<ftp://172.22.8.31>), a RAPTOR formatted CDR extraction (see Appendix 1, Radar Data Porcessing) and a voice tape (if requested) shall be forwarded electronically, mailed or played over the phone, to AAT-200 within 72 hours of an event. All files shall be named with the operational error number and centers shall include sector and video map number, either with the file or in the OE report. All employees with a prior error within 2 1/2 years shall also fax/e-mail a copy of the employees' prior TTD to AAT-200 by the next business day (202-267-7389/9356). Please ensure the OE number is on the form.

3. Accidents: all IFR or VFR Fatalities where ATC was providing services or a significant accident (see definition below) shall be conferenced through the WOC with the involved AT Facility(s), ATD and AAT-200 as soon as possible, but no later than 2 hours from time of occurrence. The ATD shall ensure and FAA Form 8020-9, Aircraft Accident/Incident Preliminary Notice and if needed, a summary is faxed to the WOC within 2 hours of all accidents. Please include the weather, and a complete synopsis on services rendered.

4. All NMACs, significant pilot deviations, significant vehicle/pedestrian deviations or other significant events (see definition below). A faxed report (appropriate report) and a conference call between the involved facilities, ATD and AAT-200 shall occur within 3 hours of the event.

5. Significant Events: a loss of separation, runway incursion, incident, accident, emergency or other event that includes an air carrier, commuter, air taxi, an aircraft carrying members of Congress, a prominent person(s), or the incident may or has become newsworthy. Please keep in mind when in doubt notify the WOC, request to be conferenced with the AAT-200 duty specialist.

INTENTIONALLY LEFT BLANK

APPENDIX 12. DATA RETENTION

INCIDENT TYPE	REQUIRED DATA	RETENTION	REFERENCE
INVESTIGATION OF AN OE/OD resulting in a determination of a non-occurrence	FAA Order 7210.56, par 5-1-3	45 days	FAA Order 7210.56, par 5-1-3
OPERATIONAL ERROR (OE)	FAA Order 7210.56, par 5-1-13	2.5 years	FAA Order 7210.56, par 5-1-13
OE-TECHNICAL VIOLATION	FAA Order 7210.56, par 5-1-13	2.5 years/ 12 months	NATCA/FAA MOU, January 17, 2001
OPERATIONAL DEVIATION (OD)	FAA Order 7210.56, par 5-1-13	2.5 years/ 12 months	NATCA/FAA MOU, January 17, 2001
INVESTIGATION OF AN INCIDENT ³ <u>OTHER THAN</u> OE/OD resulting in a determination of a non-occurrence	FAA Order 8020.11 according to the type incident being investigated ⁴	45 days	FAA Order 8020.11
QAR INVESTIGATION	Data used to investigate incident	45 days	FAA Order 7210.56
NEAR MID-AIR COLLISION	FAA Order 8020.11, par 81	2.5 years	FAA 8020.11, par 81 l.
HATR/OHR	FAA Order 8020.11, par 82	2.5 years	FAA 8020.11, par 82c(4)
PILOT DEVIATION	FAA Order 8020.11. Par 84	2.5 years	FAA 8020.11, par 84r.
VEHICLE/PEDESTRIAN DEVIATIONS	FAA Order 8020.11, par 86	2.5 years	FAA 8020.11, par 86j.
OTHER AT INCIDENTS	FAA Order 8020.11, par 85, 87, 88	2.5 years	FAA 8020.11, par 85j.
INFORMAL ACCIDENT	FAA Order 8020.11	2.5 years	FAA 8020.11, par 79c.
FORMAL ACCIDENT-COPIES	FAA Order 8020.11, par 74	2.5 years	FAA 8020.11, par 79b.
FORMAL ACCIDENT-ORIGINAL PACKAGE	FAA Order 8020.11, par 74	5 years ⁵	FAA 8020.11, par 79a.

³ In this context, "incident" refers to those events as defined in FAA Order 7210.56, paragraph 4-1-1, except Operational Errors/Deviations.

⁴ The 45-day requirement has to do primarily with the preservation of voice recordings, radar data and supporting data beyond the normal 15-day retention requirement.

⁵ Except when advised by AAT-200, that the accident is in litigation, then retain until advised by AAT-200.

INTENTIONALLY LEFT BLANK

APPENDIX 13.
OPERATIONAL ERROR/DEVIATION
HANDLING PROCEDURES AND RETURN TO OPERATIONAL DUTY

1. All Surface Errors, MVA/Obstruction, Oceanic errors, IFR vs. VFR and/or all Terminal errors on final; where the separation requirement is 1.0nm, 1.5nm or 2.0nm; shall be handled in accordance with FAA Order 7210.56 paragraph 5-1-9, Return to Operational Duty. The 80% rule does not apply to these types of errors and as a minimum the following shall be accomplished:

- a. Conduct an in-depth review with all involved employees.
- b. Identify all deficiencies.
- c. Document the discussion.
- d. Assess performance; decertify and provide remedial training if performance history warrants such action, or provide skill enhancement training as needed and document in the employees' training record (do not reference the error in the training jacket).
- e. When it is appropriate for the employee to return to duty, administer a skill check prior to return to operational duties. Skill enhancement training may be provided before or after the involved employee(s) have returned to duty. Conduct a 30-day follow-up performance skill check with all involved employees'.

2. At all EARTS facility's AND/OR any En-route or Terminal error that occurs and radar data is not immediately available to review and all indications are that at least 80% separation minima was maintained and/or AAT-200 is unable to provide a severity classification within 1-hour of notification shall be handled as a Low Severity for initial return to duty. If radar data later becomes available and the event is then classified as a moderate or high severity, then post event skill enhancement or decertification/remedial training may be accomplished as outlined below.

3. All Operational Deviations shall be handled as a Low Severity, as outlined below.

4. Any Operational Error determined to be a Low Severity:

a. The employee shall be provided a reasonable opportunity to participate in the preliminary investigation.

b. As soon as the preliminary investigation is complete, all employees' found to be contributory or primary to the Low Severity/Operational Deviation (controlled or uncontrolled) **shall be returned to duty WITHOUT a Return to Duty (RTD) skill check** or the 30-day follow-up skill check.

c. If the Low Severity/Operational Deviation was "**uncontrolled**" (per AAT-20) and performance warrants, skill enhancement training **may be** provided after the employee(s) has been returned to duty.

d. If the Low Severity or Operational Deviation was “**controlled**” (per AAT-20), skill enhancement training **shall not** be accomplished.

e. The employees’ first-line supervisor shall conduct an in-depth review of the event with the employee as soon as possible/practical, but after the employee has returned to operational duty.

f. The employees’ first line supervisor shall discuss any identified performance deficiencies.

g. The employees’ first line supervisor may document the discussion, but keep in mind this document shall not be used for any future return to duty preparation.

h. In the event that the classification is later determined to be moderate or severe, skill enhancement training may be assigned and the corresponding documentation will be retained per normal retention requirements.

5. Any Operational Error that is determined to be Moderate:

a. The employee shall be provided a reasonable opportunity to participate in the preliminary investigation.

b. The employees’ first-line supervisor shall conduct an in-depth review of the event with the employee as soon as possible/practical.

c. The employees’ first-line supervisor shall discuss/address any identified performance deficiencies.

d. The employees’ first-line supervisor shall document the discussion.

e. Skill enhancement training may be administered for any identified performance issues and/or; decertification may only occur, if prior documented performance history warrants such action.

f. If decertification occurs, then remedial training shall be administered.

g. A skill check IS required prior to any return to operational duties and a 30-day follow-up skill check shall occur.

6. Any Operational Error that is determined to be High:

a. The employee shall be provided a reasonable opportunity to participate in the preliminary investigation.

b. The employees’ first-line supervisor shall conduct an in-depth review of the event with the employee as soon as possible/practical.

c. The employees’ first-line supervisor shall discuss/address any identified performance deficiencies.

- d. The employees' first-line supervisor shall document the discussion.
- e. Skill enhancement training, shall be administered for any identified performance issues and/or:
- f. Decertification may occur if proper documented performance history warrants such action.
- g. If decertification occurs then remedial training shall be administered.
- h. A skill check IS required prior to return to operational duties and a 30-day follow-up skill check shall occur.

7. Additionally, please keep these factors in mind:

The severity index was designed to assess the severity of the error and may not adequately reflect actual employee performance. So, based upon the facility's review of performance and/or if an isolated event is so grievous that it leads you to question the employees' overall ability to safely perform their duties ("prevent the collision between aircraft" and "organize and expedite the flow of traffic safely"), as a minimum skill enhancement training or decertification with remedial training may be accomplished, based on the individuals documented performance history (except for controlled low severity or operational deviations). If the employees' known performance deficiencies were not properly documented (TTD's, supervisory notes or other documents) you may not use this "snapshot" or isolated incident, as the sole determining factor for decertification and administering remedial training.

INTENTIONALLY LEFT BLANK