

# NOTICE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
Air Traffic Organization Policy

N JO 7210.681

**Effective Date:**  
March 17, 2008

**Cancellation Date:**  
March 16, 2009

**SUBJ:** Operational Error Reporting, Investigation, and Severity Policies

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- 1. Purpose of This Notice.** This Notice supports the implementation of the separation conformance method of categorizing losses of airborne separation. The changes described in this Notice are essential to transition to an outcome based severity classification and provide standard processes that will give greater transparency and ultimately increased understanding by our customers, owners and employees. The ATO's Safety Services office provides policy interpretations concerning administration of this Notice.
- 2. Audience.** This notice applies to the all Washington headquarters, Air Traffic Organization offices including all air traffic field facilities; service center offices; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.
- 3. Where Can I Find This Notice?** This notice is available on MyFAA employee Web site at [https://employees.faa.gov/tools\\_resources/orders\\_notices/](https://employees.faa.gov/tools_resources/orders_notices/) and on the air traffic publications Web site at [http://www.faa.gov/airports\\_airtraffic/air\\_traffic/publications](http://www.faa.gov/airports_airtraffic/air_traffic/publications).
- 4. Action.** Air traffic facility managers shall ensure that the provisions of this notice are briefed to all front-line managers, controllers-in-charge (CIC), and air traffic controllers prior to conducting operations.
- 5. Procedures.** Replace the entire Chapter 5 in Federal Aviation Administration Order (FAAO) 7210.56 C, Air Traffic Quality Assurance, with text for Chapter 5 as provided below. This Notice replaces subparagraphs a through m as listed under the fifth paragraph (first 14+ pages) of FAA Notice JO 7210.663; (subparagraphs n through o, and Appendices A through D remain in effect).

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

### 5-1-1. DEFINITIONS

**a. Closest Proximity.** The closest proximity is defined as the point at which the combined lateral and vertical separation results in the lowest slant range, regardless of geometry, as determined by the separation conformance calculator. Closest proximity is entered into Block 7 of the Preliminary OE/OD Report (Form 7210-2) and Block 8 of the Final OE/OD Report (Form 7210-3), and the appropriate block of the Proximity Event Report (new), Form 7210-6.

**b. Final Report.** Refers to FAA Form 7210-3, "Final Operational Error/Deviation Report."

**c. No Severity.** Refers to losses of the separation minima that do not qualify for a separation conformance rating; e.g., minimum vectoring altitude (MVA), oceanic, surface, non-radar, and military formation flights.

**d. Operational Deviation (OD).** An occurrence attributable to an element of the air traffic system in which applicable separation minima as required by FAA Order 7110.65 or other national directive 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.

**e. Operational Error (OE).** An occurrence attributable to an element of the air traffic system in which:

(1) Less than 90% of the applicable separation minima results between two or more airborne aircraft, or less than the applicable separation minima results between an aircraft and terrain or obstacles (e.g., operations below minimum vectoring altitude (MVA); aircraft/ equipment / personnel on runways), as required by FAA Order 7110.65 or other national directive; or

(2) An aircraft lands or departs on a runway closed to aircraft operations after receiving air traffic authorization, or

(3) An aircraft lands or departs on a runway closed to aircraft operations, at an uncontrolled airport and it was determined that a NOTAM regarding the runway closure was not issued to the pilot as required.

**f. Performance.** Human conduct including actions (or inactions) leading to, during, and after an OE/PE/OD.

**g. Preliminary Report.** Refers to FAA Form 7210-2, "Preliminary Operational Error/Deviation Report."

**h. Proximity Event.** A loss of separation minima between two aircraft where 90 percent or greater separation is maintained in either the horizontal or vertical plane. This does not include any violation of wake turbulence separation minima or losses of separation that are classified under the No Severity minima.

**i. Proximity Event Report.** Refers to FAA Form 7210-6, "Proximity Event Report."

**j. Regional Operations Center (ROC).** One of nine communications center serving the FAA's local Regional offices and the ATO's Service Area and Service Center offices.

**k. Remaining hazards.** Primary and/or contributing causes of operational errors identified as still present following an operational error investigations or analysis.

**l. Separation loss.** The amount of separation (feet or nautical miles) less than the prescribed separation minima.

**m. Separation retained.** The amount of separation remaining (feet or nautical miles) when the separation loss is subtracted from the prescribed separation minima.

**n. Separation Conformance.** A numerical indicator of the percentage of the separation maintained as a function of the separation required at the point of closest proximity. An electronic calculator is available (see ATQA website) to calculate the separation conformance number and the associated severity category. If unable to access the calculator, multiple tables are available (see N JO 7210.663 Appendix C) to determine the severity category. Separation distances (lateral and vertical) used to classify any separation loss are entered into Block 22 of the Preliminary OE/OD Report (Form 7210-2) and Block 65 of the Final OE/OD Report (Form 7210-3) using the format: "SC \_\_\_\_\_ (*lateral distance in NM*) / \_\_\_\_\_ (*vertical distance in ft*), \_\_\_\_\_ (*severity category*)." Separation conformance is not calculated for "No Severity" events.

**o. Separation Conformance Index.** Aggregate number that results from adding multiple composite slant range numbers together and dividing by the total number of (incidents) numbers used in the aggregate.

**p. Service Area.** Replaces regional Air Traffic Division (ATD) throughout the previous version of Order 7210.56C.

**q. Severity Category.** Refers to the scale used to classify OEs and Proximity Events; A, B, and C categories refer to a group of OEs with similar proximity outcomes, with Category A being the most severe form of OE. Proximity Event refers to the most minor of airborne losses of separation.

**r. Significant event.** A suspected or actual separation loss involving a member of the Congress, involves Presidential Aircraft, or the media that may generate significant media interest.

**s. Slant Range.** The straight line distance between two aircraft.

**t. Training & Proficiency Record (FAA Form 3120-1).** The record for recording air traffic control technical training.

**u. Washington Operations Center (WOC).** Communications center serving the FAA's Headquarters and key ATO offices.

### 5-1-2. SUSPECTED EVENT

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

**NOTE-**

**1.** *Maintaining an efficient and safe air traffic control system requires that all deficiencies (including losses of separation) in our system be identified for analysis and reporting. Separation losses, even small losses such as Proximity Events, must be immediately reported to any available management official or controller-in-charge (CIC), even if not electronically detected. Proximity Events must be reported regardless of the probable cause.*

**2.** *To support the agency's initial determination as to whether an investigation is warranted, employees must be verbally notified they have been associated with a possible OE/OD and must provide the preliminary information of which they have knowledge, when requested by the management official or CIC. This phase is meant only to determine the need for an investigation and is not investigatory.*

### 5-1-3. INITIAL INVESTIGATIONS

**a.** The initial investigation should be fact finding in nature. It determines what occurred in the system, ensures corrective action is initiated to maintain system integrity, and provides for appropriate reporting and future analysis.

**NOTE –**

**1.** *There are occasions when higher levels of management may require further review of a suspected incident, and this further review may result in the discovery of an incident not previously identified.*

**2.** *It is understood and expected that some level of investigation will be required to determine whether an event is an operational error, proximity event or non-event. Some facilities presently have tools in place to aid in this investigation (FALCON, TARP, PRM-LSI, NOP). Additional tools are being developed and will be delivered in the future.*

**b.** The management official, or the CIC when a management official is not available, must determine the validity of suspected OE/PE/OD, and if valid, must ensure the following items are accomplished.

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

(1) When information indicates that an OE/PE/OD may have occurred in another facility, advise that facility's management official or CIC immediately, and conduct a QAR in accordance with section 4-1-3 of Order 7210.56C.

(2) When preliminary review indicates that 90% or more of the required vertical or lateral separation was maintained, and wake turbulence separation did not apply to an airborne separation loss, consider the incident to be a Proximity Event.

**NOTE –** *Minimize the operational disruptions for any investigation of Proximity Events.*

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

(4) An employee may be withheld from performing operational duties while the separation maintained and/or pilot action/responses during the event are being verified. Regardless of the preliminary OE/PE/OD review findings, the investigation must proceed in accordance with paragraphs 5-1-5, 5-1-8, 5-1-16, and 5-1-17.

**NOTE-**

**1.** *Involved employees participating in suspected OE/OD investigations may need to remain in the facility beyond their scheduled shifts to complete their statements, be interviewed, and participate in the initial investigations.*

**2.** *Removal from operational duties, pending determination that an OE/OD has occurred, does not constitute decertification.*

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

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

*NOTE – Multiple PEs may be reported on a summary report (see paragraph 5-1-5, subparagraph s).*

**b.** When an OE/PE/OD occurs, and the reaction to that incident creates a chain reaction of additional OEs, PEs or ODs, the multiple incidents will be considered as a single incident only for return to operational duty purposes, performance skill checks, and training actions or plans, and entries in FAA Order 3120-1.

**5-1-5. INVESTIGATIVE PROCESS**

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

**a.** **Fact Finding.** The investigation of an OE/OD must entail an in-depth inquiry into all causal factors. The following should be considered for a comprehensive investigation:

- (1) Facility procedures.
- (2) Facility training.
- (3) Facility supervision.
- (4) Equipment.
- (5) Control environment.

- (6) External factors.
- (7) Controller action vs. inaction.
- (8) Airspace configuration.
- (9) Traffic flow/volume/initiatives.

(10) Pilot actions, including the consequence of any Traffic Alert and Collision Avoidance System (TCAS) event.

(11) Route of flight or taxi route, as appropriate.

(12) Weather.

(13) Position configuration.

(14) Coordination procedures.

(15) Airport environment:

- (a) Runway markings.
- (b) Ramp use.
- (c) Areas of poor visibility (blind spots, fog).
- (d) Runway configuration.
- (e) Airport Congestion.
- (f) Surface Conditions (rain, ice, snow)

(16) Human factors.

(17) Compare the system time of any pertinent equipment.

(18) Staffing levels and/or position assignments based on proficiency vs. complexity/volume.

(19) Radar Data (see Appendix 1, Radar Data Processing).

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

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

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

**NOTE-**

1. For Controller-Pilot Data Link Communications (CPDLC) systems, data reduction and analysis tool printouts will indicate a chronological sequence of textual CPDLC transactions. Individual CPDLC messages are stored in the DataLink Applications Processor temporary file as a binary encoded message and can be printed out in a text format for review.

2. Requests for User Request Evaluation Tool (URET) and Display System Replacement (DSR) data should be made through the DSR/URET Helpdesk at 800-377-0308.

e. Review voice recordings as soon as feasible.

(1) Two certified re-recordings, one marked "original" and the other marked "Copy" must be made from the original voice recording and must include the audible time channel. Facilities must retain both recordings in the OE/OD file. These recordings must be certified and labeled in accordance with FAA Order 8020.16. Cassette tapes, digital file (e.g. WAV), and computer diskette are suitable media. Include all communications for a period of five minutes before initial contact to five minutes after the last contact with each position involved in the OE.

(2) If the above period exceeds 30 minutes, the Director of Operations at the Service Area may approve, with Safety Services Investigations & Evaluations concurrence, limiting the recording to that period pertinent to the specific OE/OD.

f. Conduct an interview with the employee(s) to obtain insight they may have into the incident for all severity category A, B, or C OEs. Employee interviews following a Proximity Event are at the discretion of facility management, unless the Proximity Event is a significant event. To provide the most complete report, complete interviews prior to Safety Services Investigations & Evaluations notification, if possible.

g. When the preliminary investigation indicates that another facility is involved in the occurrence, confer with the other Manager(s) as soon as feasible to determine the scope of the other facility's investigative effort and how long it will take.

h. The Manager of any other involved facility must provide the reporting facility with information and assistance as required. This may require an investigation on the same scale as that performed by the reporting facility, in which case the Manager must have the same responsibilities, as defined in 5-1-3, Initial Investigations. The Manager of any other involved facility must also retain all pertinent original data.

i. Notify the Air Traffic Manager of the OE/OD.

j. If the incident involves multiple facilities and they cannot agree on which facility has the primary responsibility, all involved facilities must complete FAA Form 7210-2 within the required notification period, and request relief from an official above them in the organization (e.g. hub, Service Area, Service Unit, and/or Safety Services).

k. Ensure that FAA Form 7210-2, Preliminary Operational Error/Deviation Investigation, is completed for OEs and ODs.

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

l. Notify Safety Services Investigations and Evaluations and the Service Area through the ROC/WOC within four hours of the time the OE/OD occurrence is first reported or suspected. The management official or CIC must notify the ROC via telephone for all OEs and ODs. Fax the following information and data to the ROC for transmittal to Safety Services Investigations & Evaluations for all OE/ODs:

(1) A completed FAA Form 7210-2.

(2) (En Route only) A reduced copy of the ESAT data, NTAP plot, and LST 5 text data; (ESAT and LST 5 text data not required for ODs).

(3) (Terminal only) A copy of the CDR plot with the associated separation data. Facilities must use the best available information when preparing FAA Form 7210-2. Lack of surveillance/voice data should not result in delay of the Preliminary OE/OD report.

**NOTE-**

*The time limit should not prevent the preliminary investigation from continuing. Instead, it ensures that Safety Services Investigations & Evaluations are aware of reported or suspected events within a reasonable time. If unable to meet the four-hour requirement, the management official or CIC must request an extension from Safety Services Investigations & Evaluations prior to the requested reporting time-limit.*

**m.** Suspected equipment or automation anomalies that may be causal or contributory must be immediately reported to (Technical Operations) the System Operations Center (SOC), or Operational Control Center (OCC), as appropriate, and investigated thoroughly. If an equipment or automation anomaly from another facility is suspected, advise a management official at the other facility immediately. Document the notification on FAA Form 7230-4.

**n.** If the preliminary investigation reveals that certain employees first believed to be involved in the OE/OD were not involved, no further action is required. If these employees have knowledge of the incidents, obtain their views and recommendations.

*NOTE - Performance areas requiring improvement or performance deficiencies must be addressed regardless of the type of error/deviation.*

**o.** Continuous Data Recording (CDR) and National Track Analysis Program (NTAP) are the most common event records used to determine proximity. Safety Services expects CDR or NTAP records as soon as feasible after every OE. In addition, En Route facilities will prepare SATORI, with voice, and capable Terminal facilities will prepare a movie file (containing RAPTOR video of radar and digital recording of voice communications), as soon as feasible after every OE. Terminal facilities not capable of producing a movie file shall provide CDR data and a cassette tape (digital WAV file is acceptable) re-recording of voice communications with the time channel, as soon as feasible after every OE/OD.

**p.** When the initial investigation results in a determination of a non-occurrence, retain all data used in the investigation process (e.g., pilot/specialist statements, records of conversations, ESAT, and CDR/NTAP data in an approved electronic format), as well as any other pertinent data not otherwise required to be retained, for 45 calendar days after the date of the determination. Facilities that determine the event was a non-occurrence based on a printed ESAT, CDR/NTAP data and plots must retain both the original paper printout and an electronic copy.

**q.** Electronic files may be made available to Safety Services using the file transfer protocol (FTP://172.22.8.31) secured intranet site.

**r.** For losses of separation determined to be Proximity Events, review available voice and radar data in order to accurately provide information required for each event as listed in N JO 7210.663 Appendix D and to determine level of operational performance of involved specialists.

**s.** Forward the required information for each Proximity Event directly to Safety Services, either by fax to (202) 385-4857 or electronically: 9-ATOS-HQ-INVESTIGATIONS/AWA/FAA by close of business of the next administrative day following the event. Information may be provided either by completion of individual Forms 7210-6 for each separate Proximity Event, or information for multiple events may be provided in a single summary report containing all required information.

### **5-1-6. ATM RESPONSIBILITIES**

**a.** The ATM of the facility whose personnel were responsible for the separation of the aircraft involved, regardless of where the OE/OD occurred, shall:

(1) Ensure that OE/OD investigations are conducted in accordance with any negotiated agreements between the FAA and pertinent labor organizations.

(2) When the Preliminary OE/OD Investigation Report indicates that another facility(s) is involved in the occurrence, as soon as feasible confer with other ATM(s) to determine the scope of the other facility's investigative effort and how long it will take. This includes gathering data and completing Parts I and II of FAA Form 7210-3, Final Operational Error/Deviation Report. If the reporting ATM and the other ATM cannot concur in any phase of their respective investigations, their differences shall be reported to the ATD for a resolution.

(3) Designate the Investigator-In-Charge (IIC). The IIC may be designated on a rotational or permanent basis. Supervisory personnel or facility staff shall perform the IIC function. If the only facility officer is the ATM, and there are no assigned supervisors, the ATM performs the IIC functions.

(4) Designate a team to assist the IIC in the investigation of each OE/OD. The ATM shall determine the size and composition of the team, but shall as a minimum afford:

(a) 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) A pilot deviation.

(2) Military facility deviation.

(3) An OD (from an OE or PE).

(4) An OE (from an OD or PE).

(5) A PE (from an OD or OE).

(6) A non-occurrence.

**b.** If a reclassification is determined to be appropriate, the Manager must:

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

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

(2) Forward FAA Form 7210-5, along with the rationale and all necessary supporting documentation, including voice tapes and radar data, to the Service Area for review no later than 45 calendar days from the date of the initial report.

**c.** The Service Area must thoroughly review all requests for reclassification for completeness of data and validity. They must forward the requests they believe have merit to the Service Unit no later than 60 calendar days from the date of the initial report.

**d.** The Service Unit must thoroughly review all forwarded requests for reclassification. They must forward the requests they believe have merit to Safety Services Investigations & Evaluations no later than 75 calendar days from the date of the initial report.

**e.** Safety Services Investigations & Evaluations must review the forwarded requests for reclassification and determine whether the requests should be granted. Safety Services Investigations & Evaluations must advise the Service Unit via memorandum of the disposition of the FAA Form 7210-5 no later than 90 calendar days from the date of the initial report.

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

f. All original forms and supporting investigative data must be retained in the facility for 2 ½ years.

#### **5-1-8. PERFORMANCE BASED ACTIONS**

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.

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 employee's documented performance history warrants such action. The employee's 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 employee's 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 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.** Investigations conducted by Safety Services under 5-1-17, ATO Safety Services Investigations, of this Notice do not relieve facility management of the requirement to complete the Final Operational Error/Deviation Report (FAA Form 7210-3).

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

**f.** For Proximity Events, the information contained on FAA Form 7210-6 or optional summary report constitutes the final report. If the investigation has revealed information that differs from that which was initially reported, an amended FAA Form 7210-6 must be prepared.

**g.** When an employee of another facility is involved in an OE, ensure that the employee's front line manager, is given sufficient documentation to determine the appropriate corrective action.

**h.** Retain the original report in the facility files.

**i.** Establish a follow-up method to evaluate the effectiveness of the local recommendations and actions that result from the investigation.

**j.** Send copies of the completed FAA Form 7210-2 or 7210-6 to (Technical Operations) the System Operations Center (SOC), or Operational Control Center (OCC), for any operational error (OE) or Proximity Event (PE) where equipment or automation is found to be contributory.

**k.** Service Areas must work closely with other Service Areas when an OE involves facilities in different Service Areas and the respective Managers cannot concur in any phase of their investigations. If 5 business days have passed since the incident and a decision cannot be reached with the other Service Areas, forward all investigative data to the Service Unit for review and resolution. If 5 business days have passed since the incident was elevated and the Service Units can not reach a decision forward all data to Safety Services for resolution. Retain all recordings, data, and documentation pertaining to the incident until Safety Services reaches a decision.

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

**a.** Proximity Events (PE) are separation losses of 10 percent or less, are not considered operational errors, and no reference to a PE will be entered into the FAA Form 3120-1.

**b.** When an employee's performance has been determined to contribute to an OE/OD, the following must be entered into the employees' FAA Form 3120-1:

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

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

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

(4) Any associated recertification must be logged, in accordance with FAA Order 3120.4, without reference to the OE.

**c.** When an employee's performance has been determined to be primary or contributory to a Proximity Event, a separate Page VI will not be included for any Proximity Event, and the following must be entered into the employee's FAA Form 3120-1:

(1) Any associated remedial and/or skill enhancement training, in accordance with FAA Order 3120.4, without reference to the Proximity Event.

(2) Any associated position recertification, in accordance with FAA Order 3120.4, without reference to the Proximity Event.

### **5-1-15. DOCUMENTATION RETENTION**

The reporting facility must:

**a.** Retain the OE/PE/OD investigation file for 2 ½ years from the date of the occurrence.

**b.** Ensure that the OE investigation file (for A, B, and C categories) is identified by a label (maximum size three × five inches) clearly marked with "OPERATIONAL ERROR," the report number, the incident local date and time, and the local date to be destroyed.

**c.** Ensure that the Proximity Event investigation file is identified by a label (maximum size three x five inches) clearly marked "PROXIMITY EVENT(s)," the date of the event(s) and the local date to be destroyed. All proximity events occurring on the same calendar day may be retained as a single file.

**d.** Ensure that the OD investigation file is identified by a label (maximum size three × five inches) clearly marked with "OPERATIONAL DEVIATION," the report number, the incident local date and time, and the local date to be destroyed.

e. Ensure that the OE/OD investigation file contains, at a minimum, the original FAA Forms 7210-2; the original FAA Form 7210-3 (if appropriate); signed employee personnel statements and/or any similar supporting documents; ATO Safety Services preliminary/final investigative reports (when ATO Safety Services designates an investigative team), the two certified re-recordings marked “Original” and “Copy” in accordance with 5-1-5, Investigative Process, for audio; and all supporting documentation such as the original ESAT, NTAP, Data Analysis and Reduction Tool (DART), or CDR plot (in both printed format and an approved electronic medium).

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

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

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

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

a. Facility. The following activities are the prime responsibility of the facility reporting the OE/OD/PE. Facilities may receive support from their Service Area and/or Service Unit offices.

(1) If the incident involves multiple facilities and the reporting Manager and the other Manager(s) cannot concur in any phase of their respective investigations, the Managers must report their differences to the Service Area for a resolution within 5 business days. If 5 business days have passed since the issue was elevated to the Service Area(s) and a decision cannot be reached with the other Service Area(s), forward all investigative data to the Service Unit(s) for review and resolution. If 5 business days have passed since the incident was elevated to the Service Unit(s) and the Service Unit(s) can not reach a decision forward all data to Safety Services for resolution.

(2) Equipment or automation anomalies that are listed as contributory require Technical Operations analysis. For each such anomaly, they must provide a description of the normal functionality and a description of the degraded condition/state associated with the anomaly.

(3) Based on the information gathered during the investigation and overall performance, the following actions may be taken in response to any OE/OD:

(a) If technical performance areas requiring enhancement are identified, develop and implement a skill enhancement training plan in accordance with FAA Order 3120.4, and include appropriate performance information in the Technical Training Discussion (TTD).

(b) If technical performance areas indicate deficiencies, develop and implement a remedial training plan in accordance with FAA Order 3120.4, and include appropriate performance information in the Technical Training Discussion (TTD).

(4) Retain a copy of the preliminary investigative report prepared in the facility OE/PE/OD file.

(5) Attach a copy of the final investigative report to the Final Operational Error/Deviation Report.

(6) Once approved by the Service Unit, facilities will enter identified risks, casual factors and corrective action plans into FSAS.

**b. Service Areas and Service Centers.** Service Areas and Service Centers must provide support to each Service Unit. Additional roles and responsibilities are to be determined.

**c. Service Units.** The following activities are the prime responsibility of the Service Unit whose facility reports any OE/OD/PE. Service Units may receive support from any Service Center and/or other Service Unit offices.

(1) Service Units will report to Safety Services appropriate management actions taken to reduce the probability of serious air traffic incident reoccurrence. The Service Unit will provide documentation of management action(s), contributing factors, and root causes of any serious air traffic incident within 72 hours (or third business day) following any category "A" OE, and within ten calendar days following any category "B" OE.

(2) Service Units will provide an analysis to Safety Services of the preliminary incident findings and recommendations received from any ATO investigative team within 10 calendar days.

(3) Service Units will analyze all losses of separation minima for causal and coincident factors. Analysis may relate each incident to past incidents at that facility/Service Area/Service Unit, (if applicable), and develop recommendations, including target completion dates, to mitigate the reoccurrence of future incidents. Service Units will report to Safety Services management actions taken, identify primary and contributing factors, and develop corrective action plans for each "A" and "B" OE to reduce the probability of reoccurrence. Service Units will report to Safety Services management actions taken, identify primary and contributing factors, and develop corrective action plans for "C" OEs and "Proximity Events" (PE) groupings to reduce the probability of reoccurrence. Service Unit reports on individual "A" and "B" OEs are reported separately, "C" OE groupings are reported monthly, and PE groupings are reported quarterly.

(4) Service Units will establish follow-up mechanisms to determine if corrective actions contained in FAA Forms 7210-3 are effective and are accomplished in a timely manner. All corrective actions must specify a completion deadline.

(5) Approve mitigation strategies identified for category "A" operational errors.

(6) Service Units will ensure their facilities have access to current technology used for automated alerts and the evaluation of operational error classifications, and that such automated tools are kept fully functional.

(7) Service Units will to the extent possible provide access to OE/PE/OD records for all facilities, Service Units, and other field offices to permit tracking of findings, mitigations, status, and analysis.

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

### **5-1-17. ATO SAFETY SERVICES INVESTIGATIONS**

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

- a.** Identify any safety hazards at the affected facility immediately following commencement of the investigation. The investigator, or team, will recommend mitigations to address these hazards within 12 hours of arriving at the facility reporting the incident, following any category "A" OE, and within 24 hours following any category "B" OE.
- b.** Submit their initial assessment of contributing factors to Safety Services within 36 hours (or second business day) following any category "A" OE, and within 72 hours (or third business day) following any category "B" OE.
- c.** Submit their preliminary investigative report to ATO Safety Services and responsible Service Unit within seven calendar days following any category "A" OE, and within ten calendar days following any category "B" OE.
- d.** Submit their final investigative report to ATO Safety Services and responsible Service Unit within 30 calendar days following any category "A" or "B" OE. Safety Services must provide the final investigative report to the Service Unit.
- e.** Safety Services will brief AOV on the initial assessment received from any investigator, or investigative team as soon as practical following receipt of the assessment, but no later 48 hours (or second business day) following any category "A" OE, and 96 hours (or fourth business day) following any category "B" OE. Primary focus of this briefing is to outline actions the ATO is taking to prevent the reoccurrence of similar incidents and to address any remaining hazards.
- f.** The Vice President of Safety Services may issue a memorandum of non-compliance whenever a serious and persistent safety risk remains following an investigation, analysis, and/or report.

### **5-1-18. ANALYSIS & FOLLOW-UP ACTIONS**

**a.** Safety Services will compare the revised FY07 severity classification records for operational errors to the former severity classification records (prior to FY07) for operational errors on a monthly basis for the first twelve months following implementation of this revised policy. The comparison reports will be distributed to the operating Service Units and AOV. The baseline safety performance to be used and the method to measure the ATO's annual safety improvement will be three years (FY04-FY06) of OE data. The baseline safety performance data will be analyzed using the proposed four severity categories based on the separation conformance.

b. Safety Services will publish a new separation conformance index designed to assess the overall conformance to standards when multiple errors are aggregated for comparison. This new separation conformance index will be used to measure improvements in the mean-separation of all "A" and "B" errors.

c. Safety Services will provide monthly briefings to AOV following implementation of this policy change to include actual improvements and make adjustments to the policy as necessary.

d. Safety Services will track, monitor and follow-up on all findings, recommendations, and mitigations related to operational errors (OE), Proximity Events (PE) and the subsequent investigations and analysis. Safety Services will audit facility records, Safety Assurance records at the Service Centers, and Service Unit records at Headquarters to ensure that controller performance continues to be evaluated and analyzed at regular intervals (no less than quarterly). Safety Services will ensure that mitigation actions are being reviewed for effectiveness after implementation of separation conformance.

**6. Distribution.** This notice is distributed to the following Air Traffic Organization service units: En Route & Oceanic, Terminal, Safety, and System Operations Services; service center offices; Air Traffic Safety Oversight Service; the William J. Hughes Technical Center; the Mike Monroney Aeronautical Center; and all air traffic control field facilities.

**7. Background:** An analysis of historical OE data indicates that the relationship between minor separation losses and controller performance was not always clear, indicative of the causes that lead to the error, or of the need to address improvements and/or performance management. This Notice complements Notice 7210.663 issued on June 25, 2007 that introduced Proximity Events as a new category of separation loss. This Notice seeks a consistent incident investigative process that commits to and supports accountability, understanding, root-cause analysis, decision-making, and continuous improvement. Information gained over the next several months as these new events were identified and reported revealed that the intent for their application has been widely misunderstood and that the required reporting procedures were not allowing some of the expected benefits to the air traffic system. These changes are intended to clarify the intent of Proximity Events and facilitate their administration. The changes described in this Notice are effective and will be incorporated in the next revision of FAA Order 7210.56.

**8. Implementation.** This notice shall be implemented on the effective date. This Notice replaces all changes to FAA Order 7210.56 related to Chapter 5 that were contained in N JO 7210.663, Operational Error Reporting, Investigation, and Severity Policies, effective June 25, 2007.



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