

NOTICE

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

N JO 7210.853

Effective Date:
October 15, 2013

Cancellation Date:
October 14, 2014

SUBJ: Operational Guidance for Fusion

- 1. Purpose of This Notice.** This notice amends FAA Order JO 7210.3 to prescribe guidance for facilities using Fusion. The notice details requirements for operational status coordination and establishing operational alternatives during a period of radar degradation.
- 2. Audience.** This notice applies to the following Air Traffic Organization (ATO) service units: En Route and Oceanic, Terminal, Mission Support, and System Operations; and all associated air traffic control facilities.
- 3. Where Can I Find This Notice?** This notice is available on the MyFAA Employee Web site at https://employees.faa.gov/tools_resources/orders_notices/ and on the air traffic publications Web site at http://www.faa.gov/air_traffic/publications/.
- 4. Cancellation.** This notice will cancel July 23, 2014, with the publication of FAA Order JO 7210.3Y, Change 1.
- 5. Procedures.** Add the following paragraph in FAA Order JO 7210.3 to read as follows:

3-6-8. OPERATIONAL GUIDANCE FOR FUSION

- a. During normal operations, Fusion must be the preferred sensor to the extent that it is operationally feasible. The Terminal Air Traffic Manager, or their designee, must decide if the Fusion tracker is usable.
 1. If the decision is made to discontinue use of the fusion tracker at specific sectors or facility-wide, the air traffic manager, or their designee, must coordinate this decision with headquarters, through the appropriate service center, prior to implementing their decision.
 2. The intent of the coordination is to ensure the service center, Terminal Operations, Headquarters, and the program office are aware of the operational status and is providing all capable resources to return to Fusion operations at the affected position/facility.
 3. Fusion outages due to planned radar shutdown of short duration need not be coordinated.
- b. During radar outages, operational alternatives must be developed and included in a facility directive that address requirements when there is degradation in the Fusion environment due to sensor availability. The steps must be predetermined and may be implemented facility-wide or sector specific.
 1. Facilities should switch to single sensor mode if there are impacts to the efficiency of facility operations due to degradation in the sensor environment while operating in Fusion mode.
 2. Facilities should use single-sensor mode in airspace that only has one long-range radar available because of anomalies, (for example, stitching or target jumping) that will impact operations when operating in fusion mode.

6. Distribution. This notice is distributed to the following ATO service units: Terminal, En Route and Oceanic, Systems Operations Services, and Mission Support; ATO Safety and Technical Training; the Air Traffic Safety Oversight Service; and the William J. Hughes Technical Center.

7. Background. Terminal Operations is currently incorporating Fusion technology into both Standard Terminal Arrival Routes (STARS) and Common Automated Terminal System Model IIIE (CARTS) platforms. Fusion not only provides for additional surveillance, it can also provide improved position information to controllers, potentially enabling reduced separation minima. Additional benefits include providing a means to synchronize track updates on an operational display regardless of surveillance source update rates, improving accuracy of target position and velocity, providing increased reliability and redundancy, providing the ability to easily add new surveillance sources, providing opportunities for computer-human interface improvements, eliminating significant jumps in target position, and improving safety function performance.

8. Safety Management System. The provisions of this notice are based on the Fusion System Safety Risk Management Document (SRMD), Sub-System Hazard/System Hazard Analysis for CARTS and STARS, prepared by the FAA Surveillance and Broadcast Services Program. This SRMD supports the procedural guidance contained in this notice.



Elizabeth L. Ray
Vice President, Mission Support Services
Air Traffic Organization

9-10-2013

Date Signed