

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

Air Traffic Organization Policy



Effective Date: March 28, 2013

SUBJ: Wide Area Multilateration (WAM) Air Traffic Control (ATC) Services at Air Route Traffic Control Centers (ARTCCs)

- 1. Purpose of This Order. This order prescribes guidance for the provision of air traffic control services at facilities that have integrated and are using Wide Area Multilateration (WAM).
- 2. Audience. This order applies to the Air Traffic Organization (ATO) En Route and Oceanic Service Unit.
- **3.** Where Can I Find This Order? This order is available on the MyFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices/ and on the FAA Web site at http://www.faa.gov/regulations policies/orders notices/.
- **Cancellation**. FAA Order JO 7110.313, Wide Area Multilateration.
- **Explanation of Policy Changes.** Prior to September 28, 2012, the use of WAM surveillance information for ATC operations was approved on a case-by-case basis supported by site specific safety risk management analysis. A list of approved WAM locations was contained in an appendix to Order JO 7110.313. This revised order reflects the approval of the NAS-wide use of WAM at all ARTCCs.
- **Action**. The ARTCC air traffic managers must ensure that the provisions of this order are appropriately briefed to all front-line managers, controllers-in-charge, and operational air traffic controllers prior to initial operational capability at any WAM site that occurs after the effective date of this order.
- 7. Procedures. WAM has been implemented into ARTCC automation systems to support radar separation and procedures in areas of limited or no conventional radar coverage. This order supports the expanded use of WAM as the source for surveillance information in authorized facilities.
- a. All procedures contained in FAA Order JO 7110.65 for the en route domain related to ATC services using secondary radar, to include radar identification, separation, advisories, and phraseology, apply to targets derived from WAM.
 - **b**. WAM data may not be used in en route automation systems for 3 NM separation.
- 8. **Distribution**. This order is distributed to the following ATO service units: System Operations Services, En Route and Oceanic, Safety Services; Air Traffic Safety Oversight Service; William J. Hughes Technical Center; and Mike Monroney Aeronautical Center.
- **9. Background**. WAM is a surveillance system that derives aircraft position through triangulation from a set of geographically dispersed ground sensors. Aircraft transponder replies must be received by a minimum number of ground sensors to derive a position report. WAM will have a defined surveillance

Distribution: ZAT-721, ZAT-464 Initiated By: AJE-3 03/28/13 JO 7110.313A

coverage area. A minimum number of ground sensors must be operating or WAM is considered to be out of service. A WAM out of service condition is treated in the same manner as a radar outage.

10. Safety Management System. The Safety Risk Management (SRM) requirement has been met by the following document dated September 28, 2012. WAM in the Safety Risk Management Document (SRMD) for Surveillance Application of Wide Area Multilateration (WAM) Services - Phase II System/Subsystem Hazard Analysis (SHA/SSHA) Operating and Support Hazard Analysis (O&SHA) supports the NAS-wide use of WAM at all ARTCCs.

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Air Traffic Organization