



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
National Policy

ORDER
JO 7110.122

Effective Date:
May 17, 2016

SUBJ: Wide Area Multilateration (WAM) Virtual Radar (VR) data for surveillance within the National Airspace System (NAS)

1. Purpose of This Order. This order prescribes guidance for the use of WAM-VR information for conducting ATC services using Standard Terminal Automation Replacement System (STARS) in Fusion Display Mode (FDM), Single Sensor Mode, and using Final Monitor Aid (FMA).

2. Audience. This order applies to all terminal air traffic facilities authorized to use this directive for operational services.

3. Where Can I Find This Order? This Order is available on the MyFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices/.

4. Requirements. Facilities must receive a Letter of Authorization from the Director, Air Traffic Procedures, AJV-8, prior to implementation.

5. Procedures. At facilities authorized to use WAM-VR for air traffic control purposes, the following provisions apply.

a. WAM-VR may be integrated as an additional surveillance source in all terminal modes of operation using the STARS automation system.

b. All procedures and requirements contained in FAA Order JO 7110.65 related to terminal separation standards apply.

c. The use of WAM-VR only information may be used to support all radar requirements associated with any published instrument procedure that is annotated "Radar Required".

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

7. Background. WAM-VR is a new secondary radar system that derives aircraft position through triangulation from a set of geographically dispersed ground sensors that comprise the WAM-VR system. Aircraft transponder replies must be received by a minimum number of ground sensors in the WAM-VR system to derive a position report. The WAM-VR system will have a defined radar coverage area. A minimum number of ground sensors must be operating or the WAM-VR system is considered out of service. A WAM-VR out of service condition is treated in the same manner as a radar outage.

8. Safety Management System. The provisions of this Order are based on the Safety Risk Management Document (SRMD) for ATC Surveillance Services with Wide Area Multilateration (WAM)-Virtual Radar (VR) and Standard Terminal Automation Replacement System (STARS), Separation Standards Performance Analysis for STARS; and prepared by the FAA Surveillance and Broadcast Services Program. This SRMD supports the procedural guidance contained in this Order.

Original Signed by Heather Hemdal

Heather Hemdal
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Mission Support Services

May 17, 2016

Date