NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.505

National Policy

Effective Date:
3/25/19

Cancellation Date:
3/25/20

SUBJ: Use of Automatic Dependent Surveillance—Broadcast (ADS-B) Out in Support of Reduced Vertical Separation Minimum (RVSM) Operations

1. Purpose of This Notice. This notice announces revisions to the Federal Aviation Administration's (FAA) requirements for application to operate in Reduced Vertical Separation Minimum (RVSM) airspace. The FAA has amended Title 14 of the Code of Federal Regulations (14 CFR) part 91 appendix G. The amendment eliminates the requirement for operators to apply for an RVSM authorization when their aircraft are equipped with qualified Automatic Dependent Surveillance—Broadcast (ADS-B) Out systems and meet specific altitude-keeping equipment performance requirements for operations in RVSM airspace.

2. Audience. The primary audience for this notice is certificate-holding district offices (CHDO) (including Flight Standards District Offices (FSDO) and certificate management offices (CMO)), International Field Offices (IFO), principal inspectors (PI), and aviation safety inspectors (ASI). The secondary audience includes Flight Standards Service offices and managers involved with RVSM policy.

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Operators can find this notice on the FAA's website at http://fsims.faa.gov. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.

4. Cancellation. Notice N 8900.500, Use of Automatic Dependent Surveillance—Broadcast (ADS-B) Out in Support of Reduced Vertical Separation Minimum (RVSM) Operations, dated January 29, 2019, is canceled.

5. Background.

a. Rule Change. Part 91 appendix G provides standards for an operator/program manager/certificate holder to apply to the FAA for specific authorization when seeking to operate in RVSM airspace. The FAA has revised part 91 appendix G to include a new Section 9, Aircraft Equipped with Automatic Dependent Surveillance—Broadcast Out. This revision permits an operator of an RVSM-capable aircraft equipped with a qualified ADS-B Out system

meeting altitude-keeping equipment performance requirements for operations in RVSM airspace to operate in that airspace without requiring a specific authorization.

b. Revision Information. Under this revision, the FAA would consider a qualified ADS-B Out system to be one that meets the requirements of part 91, § 91.227. The FAA will continually perform height-keeping performance monitoring on ADS-B Out-equipped flights at RVSM altitudes for all airspace defined in § 91.225. Based on the technological advances provided by ADS-B Out systems, detailed applications and specific authorizations for operators of these aircraft to conduct operations in RVSM airspace are no longer required. This revision to part 91 appendix G and other conforming amendments are included in FAA Final Rule, 2120-AK87, dated December 21, 2018.

c. FAA Order 8900.1 Guidance. The following sections in Order 8900.1 have been revised:

(1) Volume 3, Chapter 18, Section 4, Part B Operations Specifications—En Route Authorizations and Limitations.

(2) Volume 4, Chapter 10, Section 1, Safety Assurance System: Authorization to Conduct Flight in Reduced Vertical Separation Minimum Airspace.

(3) Volume 4, Chapter 10, Section 2, Safety Assurance System: Evaluate Aircraft for Reduced Vertical Separation Minimum Compliance.

d. Advisory Circular (AC) 91-85, Authorization of Aircraft and Operators for Flight in Reduced Vertical Separation Minimum (RVSM) Airspace. AC 91-85 has been updated for operators who want to operate under the provisions of the new part 91 appendix G, section 9.

6. Implementation. Effective 30 days after publication:

a. Operating Under the Provisions of the New Part 91 Appendix G, Section 9. Operators and pilots seeking to operate in RVSM airspace under part 91 appendix G, section 9 are not required to apply for specific authorizations. The operator should refer to AC 91-85 for guidance on operating under the new provisions. The operator must:

(1) Determine the aircraft is RVSM-compliant.

(2) Ensure pilots are knowledgeable of RVSM requirements, policies, and procedures sufficient for the conduct of operations in RVSM airspace for which it intends to operate.

(3) Ensure the aircraft meets RVSM performance standards and has its altitude-keeping equipment performance monitored in accordance with AC 91-85, Paragraph 4.3, Altitude-Keeping Performance Monitoring for RVSM Aircraft Equipped With ADS-B Out.

(a) The initial RVSM operation of an aircraft must be in airspace where sufficient ADS-B data can be collected for the FAA to evaluate RVSM performance. This airspace is currently defined in § 91.225(a) between flight level (FL) 290 and FL 410, inclusive. A

coverage map of FAA-monitored ADS-B airspace can be found at http://www.faa.gov/nextgen/programs/adsb/coverageMap/.

(b) After initial operations, the aircraft's altitude-keeping equipment performance must have been monitored within the previous 24 months in airspace where the FAA can monitor the ADS-B Out signal and found to be in RVSM compliance.

(c) Operators are able to confirm aircraft performance is RVSM-compliant by checking the North American Approvals Registry and Monitoring Organization (NAARMO) altitude-keeping equipment performance monitoring website (described below).

(4) If the operator and aircraft meet RVSM requirements, properly annotate the flight plan in accordance with AC 91-85, Appendix B, Paragraph B.3, Operating Policies and Procedures in U.S.-Controlled RVSM Airspace.

b. Aircraft Altitude-Keeping Equipment Performance Monitoring Under the New Part 91 Appendix G, Section 9.

(1) Aircraft equipped with qualified ADS-B Out systems will be height-monitored during normal operations at RVSM altitudes when operating in airspace where sufficient ADS-B data is available to the FAA to determine RVSM performance.

(2) The aircraft must continue to meet the altitude-keeping equipment performance specified in part 91 appendix G, section 9(b) and the aircraft's altitude-keeping equipment performance must have been monitored within the previous 24 months in airspace where the FAA can monitor the ADS-B Out signal and found to be in RVSM compliance.

c. Altitude-Keeping Equipment Performance Monitoring Website. U.S.-registered operators whose altitude-keeping equipment performance has been evaluated using data collected through ADS-B Out may obtain monitoring performance at http://www.faa.gov/air_traffic/separation_standards/naarmo/.

(1) U.S. operators seeking to operate under the provisions of part 91 appendix G, section 9 should notify the NAARMO of their initial flight details by completing the email template at http://www.faa.gov/air_traffic/separation_standards/NAARMO/RVSM_approvals.

(2) Determination of RVSM altitude-keeping equipment performance requires post-flight processing. U.S.-registered operators who have conducted operations under the provisions of part 91 appendix G, section 9 and do not show record on the above website should contact NAARMO via email at NAARMO@faa.gov.

d. When to Issue a B046 RVSM Operations Specification (OpSpec), Management Specification (MSpec), or Letter of Authorization (LOA). An operator, program manager, or certificate holder must apply for a specific authorization to the FAA for an OpSpec, MSpec, or LOA when seeking RVSM authority under the provisions of Part 91 Appendix G, Section 3, Operator Authorization. Operators, program managers, or certificate holders will still submit an application to the FAA for RVSM authority when:

(1) Their aircraft are not equipped with qualified ADS-B Out systems;

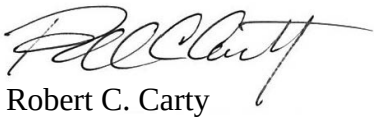
(2) The operator, program manager, or certificate holder operates in RVSM airspace where the FAA cannot successfully monitor the aircraft's height-keeping performance; or

(3) The operator, program manager, or certificate holder intends to conduct RVSM operations in foreign airspace where the State authority requires a specific RVSM operational authorization.

e. Operating Outside U.S.-Controlled Airspace. International Civil Aviation Organization (ICAO) Annex 6, Operation of Aircraft, parts I and II require specific authorization by the State of the Operator for international commercial air transport aircraft or the State of Registry for operators of international General Aviation (GA) aircraft. To meet the provisions of ICAO Annex 6, a U.S. operator intending to conduct RVSM operations outside of U.S.-controlled airspace, even if meeting the provisions of part 91 appendix G, section 9, must obtain an OpSpec, MSpec, or LOA as currently issued under the provisions of part 91 appendix G. Additionally, foreign operators seeking to operate in U.S.-controlled RVSM airspace still need specific authorization issued by their State authority or State of Registry, as applicable, until such time that ICAO guidance is amended.

f. Aircraft Listed on a Current RVSM Authorization. Operators with aircraft listed on an active RVSM OpSpec/MSpec/LOA should operate under the provisions of part 91 appendix G, section 3. If an operator wishes to begin operating an aircraft that is listed on their specific RVSM authorization (under the provisions of part 91 appendix G, section 3) under the provisions of part 91 appendix G, section 9, the operator should request to have the aircraft removed from their list of specifically authorized RVSM aircraft.

7. Disposition. We will incorporate the information in this notice into Order 8900.1 before this notice expires. Direct questions concerning the information in this notice to the Flight Technologies and Procedures Division at 202-267-8855.



Robert C. Carty
Deputy Executive Director, Flight Standards Service