

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.376

National Policy

Effective Date:
8/17/16

Cancellation Date:
8/17/17

SUBJ: OpSpec/MSpec/LOA B046, Operations in Reduced Vertical Separation
Minimum Airspace

- 1. Purpose of This Notice.** This notice announces revisions to Operations Specification (OpSpec)/Management Specification (MSpec)/Letter of Authorization (LOA) B046, Operations in Reduced Vertical Separation Minimum Airspace, issued to operators for authorization to conduct operations in Reduced Vertical Separation Minimum (RVSM) airspace. The associated Web-based Operations Safety System (WebOPSS) templates for paragraphs B046 have been revised to align with changes made in Title 14 of the Code Federal Regulations (14 CFR) part 91 appendix G, Operations in RVSM Airspace. Revised template B046 will be issued to operators receiving new authorizations or in conjunction with the revision of an existing authorization. Operators currently holding a B046 paragraph are not required to surrender them.
- 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 regional Flight Standards division (RFSD) managers and headquarters (HQ) policy divisions.
- 3. Where You Can Find This Notice.** You can find this notice on the MyFAA employee Web site 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 Federal Aviation Administration's (FAA) Web site at <http://fsims.faa.gov>. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.
- 4. Background.** Part 91 appendix G originally included requirements for an RVSM applicant to submit an RVSM-Approved Maintenance Program outlining procedures to maintain authorized aircraft (Section 3, subparagraph (b)(i-iii)). This requirement was removed by Amendment 91-342, Final Rule 81 FR 47009, dated July 20, 2016. Accordingly, all above-referenced paragraph templates are revised to no longer include references to an RVSM-Approved Maintenance Program.

5. Guidance. This notice contains the following samples of the OpSpec/MSpec/LOA B046 templates for different operations:

- The sample OpSpec B046 template in Appendix A applies to part 121.
- The sample OpSpec B046 template in Appendix B applies to part 121/135.
- The sample OpSpec B046 template in Appendix C applies to part 125.
- The sample OpSpec B046 template in Appendix D applies to part 135.
- The sample MSpec B046 template in Appendix E applies to part 91 subpart K (part 91K).
- The sample LOA B046 template in Appendix F applies to part 91.
- The sample LOA B046 template in Appendix G applies to part 125M (Letter of Deviation Authority (LODA) A125).

6. Action. This action applies only to those PIs and ASIs who are responsible for issuing or revising operator authorizations to conduct operations in RVSM airspace.

a. New Authorizations. Issue authorization using revised WebOPSS templates.

b. Revision to Existing Authorization, Operators Who Are Not Required by the Rule They Operate Under to Hold Approved Maintenance or Inspection Programs. Issue revised authorization using revised WebOPSS templates.

c. Revision to Existing Authorization, Operators Who Are Required by the Rule They Operate Under to Hold Approved Maintenance or Inspection Programs. Prior to issuance of new RVSM authorization paragraphs, review the operator's required maintenance or inspection program to ensure required content is present. Issue revised RVSM authorization using the revised WebOPSS templates.

7. Disposition. The information contained in this notice has been incorporated into FAA Order 8900.1. Direct your questions or comments concerning this notice to the Aircraft Maintenance Division (AFS-300) at (202) 267-1675.

ORIGINAL SIGNED by

/s/ John Barbagallo
Deputy Director, Flight Standards Service

Appendix A. Sample OpSpec B046, Operations in Reduced Vertical Separation Minimum (RVSM) Airspace: 14 CFR Part 121

- a. The certificate holder is authorized to conduct operations within airspace designated as Reduced Vertical Separation Minimum (RVSM) airspace in accordance with the limitations and provisions of this paragraph. The certificate holder shall not conduct any other operations in RVSM airspace under these operations specifications.
- b. Required Altitude-Keeping Equipment. The certificate holder shall not takeoff an airplane for flight within airspace where RVSM is applied unless the Administrator has approved the following aircraft systems for RVSM operations and they are available, operational, and properly maintained:
- (1) Two independent altitude measurement systems comprised of the following elements:
 - (a) Cross-coupled static source system provided with ice protection, if located on the aircraft in areas subject to ice accretion;
 - (b) Equipment for measuring static pressure sensed by the static source, converting it to pressure altitude and displaying pressure altitude to the flightcrew;
 - (c) Equipment for providing a digitally-coded signal corresponding to the displayed pressure altitude for automatic altitude reporting purposes;
 - (d) Static source error correction (SSEC), if required to meet RVSM altimetry system error (ASE) requirements; and
 - (e) Equipment to provide reference signals for automatic altitude control and alerting systems.
 - (2) One Secondary Surveillance Radar (SSR) altitude reporting transponder.
 - (3) One altitude alert system.
 - (4) One automatic altitude control system capable of automatically controlling the aircraft to a referenced pressure altitude.
- c. Required Pilot Training. Except when under the supervision of an appropriately trained check airman, the flightcrew must have completed an approved training program on RVSM operating practices and procedures.
- d. Authorized Airplanes. The certificate holder is authorized to conduct operations in designated RVSM airspace with the airplanes listed in paragraph D092 of these operations specifications.
- e. Deviation to RVSM Requirements. The Administrator may authorize an operator to deviate from RVSM requirements for a specific individual flight in RVSM airspace if:

(1) The operator submits an appropriate request with the air traffic control center (ATCC) controlling the airspace in advance of the operation.

(2) At the time of filing the flight plan for the flight, air traffic control (ATC) determines that the aircraft may be provided appropriate separation, and the flight will not interfere with, or impose a burden on, other operators.

Appendix B. Sample OpSpec B046, Operations in Reduced Vertical Separation Minimum (RVSM) Airspace: 14 CFR Part 121/135

a. The certificate holder is authorized to conduct operations within airspace designated as Reduced Vertical Separation Minimum (RVSM) airspace in accordance with the limitations and provisions of this paragraph. The certificate holder shall not conduct any other operations in RVSM airspace under these operations specifications.

b. Required Altitude-Keeping Equipment. The certificate holder shall not takeoff an airplane for flight within airspace where RVSM is applied unless the Administrator has approved the following aircraft systems for RVSM operations and they are available, operational, and properly maintained:

(1) Two independent altitude measurement systems comprised of the following elements:

(a) Cross-coupled static source system provided with ice protection, if located on the aircraft in areas subject to ice accretion;

(b) Equipment for measuring static pressure sensed by the static source, converting it to pressure altitude and displaying pressure altitude to the flightcrew;

(c) Equipment for providing a digitally-coded signal corresponding to the displayed pressure altitude for automatic altitude reporting purposes;

(d) Static source error correction (SSEC), if required to meet RVSM altimetry system error (ASE) requirements; and

(e) Equipment to provide reference signals for automatic altitude control and alerting systems.

(2) One Secondary Surveillance Radar (SSR) altitude reporting transponder.

(3) One altitude alert system.

(4) One automatic altitude control system capable of automatically controlling the aircraft to a referenced pressure altitude.

c. Required Pilot Training. Except when under the supervision of an appropriately trained check airman, the flightcrew must have completed an approved training program on RVSM operating practices and procedures.

d. Authorized Airplanes. The certificate holder is authorized to conduct operations in designated RVSM airspace with the airplanes listed in paragraph D092 of these operations specifications.

e. Deviation to RVSM Requirements. The Administrator may authorize an operator to deviate from RVSM requirements for a specific individual flight in RVSM airspace if:

(1) The operator submits an appropriate request with the air traffic control center (ATCC) controlling the airspace in advance of the operation.

(2) At the time of filing the flight plan for the flight, air traffic control (ATC) determines that the aircraft may be provided appropriate separation, and the flight will not interfere with, or impose a burden on, other operators.

Appendix C. Sample OpSpec B046, Operations in Reduced Vertical Separation Minimum (RVSM) Airspace: 14 CFR Part 125

a. The certificate holder is authorized to conduct operations within airspace designated as Reduced Vertical Separation Minimum (RVSM) airspace in accordance with the limitations and provisions of this paragraph. The certificate holder shall not conduct any other operations in RVSM airspace under these operations specifications.

b. Required Altitude-Keeping Equipment. The certificate holder shall not takeoff an airplane for flight within airspace where RVSM is applied unless the Administrator has approved the following aircraft systems for RVSM operations and they are available, operational, and properly maintained:

(1) Two independent altitude measurement systems comprised of the following elements:

(a) Cross-coupled static source system provided with ice protection, if located on the aircraft in areas subject to ice accretion;

(b) Equipment for measuring static pressure sensed by the static source, converting it to pressure altitude and displaying pressure altitude to the flightcrew;

(c) Equipment for providing a digitally-coded signal corresponding to the displayed pressure altitude for automatic altitude reporting purposes;

(d) Static source error correction (SSEC), if required to meet RVSM altimetry system error (ASE) requirements; and

(e) Equipment to provide reference signals for automatic altitude control and alerting systems.

(2) One Secondary Surveillance Radar (SSR) altitude reporting transponder.

(3) One altitude alert system.

(4) One automatic altitude control system capable of automatically controlling the aircraft to a referenced pressure altitude.

c. Required Pilot Training. Except when under the supervision of an appropriately trained check airman, the flightcrew must have completed an approved training program on RVSM operating practices and procedures.

d. Authorized Airplanes. The certificate holder is authorized to conduct operations in designated RVSM airspace with the airplanes listed in paragraph D092 of these operations specifications.

e. Deviation to RVSM Requirements. The Administrator may authorize an operator to deviate from RVSM requirements for a specific individual flight in RVSM airspace if:

(1) The operator submits an appropriate request with the air traffic control center (ATCC) controlling the airspace in advance of the operation.

(2) At the time of filing the flight plan for the flight, air traffic control (ATC) determines that the aircraft may be provided appropriate separation, and the flight will not interfere with, or impose a burden on, other operators.

Appendix D. Sample OpSpec B046, Operations in Reduced Vertical Separation Minimum (RVSM) Airspace: 14 CFR Part 135

a. The certificate holder is authorized to conduct operations within airspace designated as Reduced Vertical Separation Minimum (RVSM) airspace in accordance with the limitations and provisions of this paragraph. The certificate holder shall not conduct any other operations in RVSM airspace under these operations specifications.

b. Required Altitude-Keeping Equipment. The certificate holder shall not takeoff an airplane for flight within airspace where RVSM is applied unless the Administrator has approved the following aircraft systems for RVSM operations and they are available, operational, and properly maintained:

(1) Two independent altitude measurement systems comprised of the following elements:

(a) Cross-coupled static source system provided with ice protection, if located on the aircraft in areas subject to ice accretion;

(b) Equipment for measuring static pressure sensed by the static source, converting it to pressure altitude and displaying pressure altitude to the flightcrew;

(c) Equipment for providing a digitally-coded signal corresponding to the displayed pressure altitude for automatic altitude reporting purposes;

(d) Static source error correction (SSEC), if required to meet RVSM altimetry system error (ASE) requirements; and

(e) Equipment to provide reference signals for automatic altitude control and alerting systems.

(2) One Secondary Surveillance Radar (SSR) altitude reporting transponder.

(3) One altitude alert system.

(4) One automatic altitude control system capable of automatically controlling the aircraft to a referenced pressure altitude.

c. Required Pilot Training. Except when under the supervision of an appropriately trained check airman, the flightcrew must have completed an approved training program on RVSM operating practices and procedures.

d. Authorized Airplanes. The certificate holder is authorized to conduct operations in designated RVSM airspace with the airplanes listed in paragraph D092 of these operations specifications.

e. Deviation to RVSM Requirements. The Administrator may authorize an operator to deviate from RVSM requirements for a specific individual flight in RVSM airspace if:

(1) The operator submits an appropriate request with the air traffic control center (ATCC) controlling the airspace in advance of the operation.

(2) At the time of filing the flight plan for the flight, air traffic control (ATC) determines that the aircraft may be provided appropriate separation, and the flight will not interfere with, or impose a burden on, other operators.

Appendix E. Sample MSpec B046, Operations in Reduced Vertical Separation Minimum (RVSM) Airspace: 14 CFR Part 91K

a. The program manager is authorized to conduct operations within airspace designated as Reduced Vertical Separation Minimum (RVSM) airspace in accordance with the limitations and provisions of this paragraph. The program manager shall not conduct any other operations in RVSM airspace under these management specifications.

b. Required Altitude-Keeping Equipment. The program manager shall not takeoff an airplane for flight within RVSM airspace unless the Administrator has approved the following aircraft systems for RVSM operations and they are available, operational, and properly maintained:

(1) Two independent altitude measurement systems comprised of the following elements:

(a) Cross-coupled static source system provided with ice protection, if located on the aircraft in areas subject to ice accretion;

(b) Equipment for measuring static pressure sensed by the static source, converting it to pressure altitude and displaying pressure altitude to the flightcrew;

(c) Equipment for providing a digitally coded signal corresponding to the displayed pressure altitude for automatic altitude reporting purposes;

(d) Static source error correction (SSEC), if required to meet RVSM altimetry system error (ASE) requirements; and

(e) Equipment to provide reference signals for automatic altitude control and alerting systems.

(2) One secondary Surveillance Radar (SSR) altitude reporting transponder.

(3) One altitude alert system.

(4) One automatic altitude control system capable of automatically controlling the aircraft to a referenced pressure altitude.

c. Required Pilot Training. Except when under the supervision of an appropriately trained check pilot, the flightcrew must have completed an approved training program on RVSM operating practices and procedures.

d. Authorized Airplanes. The program manager is authorized to conduct operations in designated RVSM airspace with the airplanes listed in paragraph MSpec D092 of these management specifications.

e. Deviation to RVSM Requirements. The Administrator may authorize a program manager to deviate from RVSM requirements for a specific individual flight in RVSM airspace if:

(1) The program manager submits an appropriate request with the air traffic control center (ATCC) controlling the airspace in advance of the operation.

(2) At the time of filing the flight plan for the flight, air traffic control (ATC) determines that the aircraft may be provided appropriate separation, and the flight will not interfere with, or impose a burden on, other program managers.

**Appendix F. Sample LOA B046, Operations in Reduced Vertical Separation
Minimum (RVSM) Airspace: 14 CFR Part 91**

Letter of Authorization

1. The operator is authorized to conduct operations within airspace designated as Reduced Vertical Separation Minimum (RVSM) airspace in accordance with the limitations and provisions of this letter of authorization (LOA) and is subject to the conditions that all operations conducted within RVSM airspace are in accordance with:

- a. Title 14 CFR part 91, § 91.703, and the flight rules contained in International Civil Aviation Organization (ICAO) Annex 2. Manually type in numbers and add spacing (using tabs and indents on the rule bar) as desired.
- b. Part 91, § 91.180, Operations within airspace designated as RVSM airspace.
- c. Part 91 appendix G.

2. Authorized Airplanes. The operator is authorized to use the airplanes listed below for operations in designated RVSM airspace when the required altitude-keeping equipment is approved and properly maintained:

Table 1 – Airplanes Approved for RVSM

Serial Number	Registration Number	Airplane M/M/S	Remarks

3. Crew Training. In accordance with §§ 91.3 and 91.703(a)(1)(2) and ICAO Annex 2 (Rules of the Air), paragraph 2.3.2 (Pre-flight action), crews are responsible for policies and procedures in areas of operations where flights are conducted.

4. Responsible Person. This person should be the individual who will be the operator, or, if the operator is a legal entity, then an officer, employee, or person whom that entity has contracted in order to act on behalf of the legal entity with respect to the RVSM authorization.

a. If the Responsible Person named on this LOA relinquishes responsibility, this LOA becomes invalid.

b. Enter the name, email address, and telephone number of the Responsible Person in Table 2:

Table 2 – Responsible Person

Name	Email Address	Telephone Number

5. RVSM Point of Contact (POC). If the operator has decided to use a separate individual other than the Responsible Person to fulfill this role, then the POC will be listed in Table 3. Otherwise, the Responsible Person will be listed in Table 2 and Table 3.

a. The POC is the individual the FAA should first contact with respect to the operator's RVSM-Compliant Aircraft operations and maintenance status.

b. If the POC is an individual other than the Responsible Person that individual is not authorized to sign the LOA.

c. Enter the name, email address, and telephone number of the RVSM POC in Table 3:

Table 3 – RVSM Point of Contact

Name	Email Address	Telephone Number

6. Deviation from RVSM Requirements. In accordance with § 91.180, the Administrator may authorize an operator to deviate from RVSM requirements for a specific individual flight in RVSM airspace if:

a. The operator submits an appropriate request with the air traffic control center (ATCC) controlling the airspace in advance of the operation.

b. At the time of filing the flight plan for the flight, air traffic control (ATC) determines that the airplanes may be provided appropriate separation, and the flight will not interfere with, or impose a burden on, other operators.

7. A copy of this LOA must be kept on the applicable aircraft while operating in RVSM airspace.

**Appendix G. Sample LOA B046, Operations in Reduced Vertical Separation
Minimum (RVSM) Airspace: 14 CFR Part 125M (LODA A125)****Letter of Authorization**

1. The Operator/Company, authorized to conduct operations in accordance with the Letter of Deviation Authority (A125 LODA), and listed at the bottom of this letter of authorization (LOA), is authorized to conduct operations within airspace designated as Reduced Vertical Separation Minimum (RVSM) airspace in accordance with the limitations and provisions of this LOA. This authorization is subject to the conditions that all operations conducted within RVSM airspace are in accordance with 14 CFR part 91, § 91.703, and the flight rules contained in International Civil Aviation Organization (ICAO) Annex 2, and part 91 appendix G.
2. Required Altitude-Keeping Equipment. The Operator/Company shall not takeoff an airplane for flight within airspace where RVSM is applied unless the Administrator has approved the following avionic systems for RVSM operations in the Operator/Company's airplanes listed in LOA D092 and they are available, operational, and properly maintained:
 - a. Two independent altitude measurement systems comprised of the following elements:
 - (1) Cross-coupled static source system provided with ice protection, if located on the airplane in areas subject to ice accretion;
 - (2) Equipment for measuring static pressure sensed by the static source, converting it to pressure altitude and displaying pressure altitude to the flightcrew;
 - (3) Equipment for providing a digitally-coded signal corresponding to the displayed pressure altitude for automatic altitude reporting purposes;
 - (4) Static source error correction (SSEC), if required to meet RVSM altimetry system error (ASE) requirements; and
 - (5) Equipment to provide reference signals for automatic altitude control and alerting systems.
 - b. One Secondary Surveillance Radar (SSR) altitude reporting transponder.
 - c. One altitude alert system.
 - d. One automatic altitude control system capable of automatically controlling the airplane to a referenced pressure altitude.
3. Required Pilot Training. Except when under the supervision of an appropriately trained check airman, the flightcrew must have completed a training program on RVSM operating practices and procedures.
4. Authorized Airplanes. The Operator/Company is authorized to conduct operations in designated RVSM airspace with the airplanes listed in LOA D092.

5. Deviation to RVSM Requirements. The Administrator may authorize an Operator/Company to deviate from RVSM requirements for a specific individual flight in RVSM airspace if:

a. The Operator/Company submits an appropriate request with the air traffic control center (ATCC) controlling the airspace in advance of the operation.

b. At the time of filing the flight plan for the flight, air traffic control (ATC) determines that the airplane may be provided appropriate separation, and the flight will not interfere with, or impose a burden on, other operators.