Ms. Margaret Gilligan Associate Administrator for Aviation Safety Federal Aviation Administration 800 Independence Avenue Washington, DC 20591

Dear Margaret:

The Performance Based Aviation Rulemaking Committee (PARC) is pleased to submit the attached report and recommendations from the PARC RVSM LOA Process Enhancement Team (PET). The PET was established by the PARC in response to a February 2012 meeting with John Allen, AFS-1, in which the general aviation industry offered to collaborate with the FAA to seek efficiencies in the issuance of Letters of Authorization (LOAs) for operation in airspace where Reduced Vertical Separation Minimum (RVSM) is implemented. The PET included RVSM-experienced FAA inspectors and industry representatives with experience gained when obtaining RVSM LOAs.

The team was instructed to not consider rulemaking but to limit its work to revising policy guidance to streamline the process by taking advantage of lessons learned and experience gained since RVSM was implemented in the NAS in January 2005.

Based upon that experience and the lessons learned, the PET noted and reemphasized that only three basic elements are always required to satisfy the regulatory requirements before a RVSM authorization is provided. They are: 1) an RVSM compliant aircraft, 2) an approved maintenance program, and 3) RVSM knowledgeable pilots. The recommendations seek to acknowledge the experience gained by operators since 2005 and to revise current policy guidance - which leads FAA inspectors to execute a complete review of every request involving a RVSM authorization even if the request is only a simple change of registration number or change in primary business address.

The recommended policy guidance developed a three-level RVSM decision matrix to assist the inspector. Under this matrix, Authorization Group I addresses situations in which the operator requests a simple administrative change, e.g. a new registration number, but the three required elements do not change from previous RVSM authorization. Authorization Group II applies where at least one of the three required elements has been previously authorized and need not be reviewed. Finally, Authorization Group III requires a complete review of all three elements in situations where no previous review has occurred. The key to the guidance is that having the new options created by Groups I and II can substantially shorten review times, but throughout, the policy is clear that the inspector always retains the option to conduct a complete review if deemed necessary.

The policy guidance contained in the report and recommendations will streamline the LOA procedure, but not diminish its effectiveness. This will save time for dozens of inspectors and hundreds of operators involved in the process every year.

The PARC therefore recommends the FAA to concur with the Report and Recommendations and endorse in the FAA publication review process.

Sincerely,

Dave Nakamura

Chairman

Performance-based operations Aviation

Rulemaking Committee

Cc: M. Steinbicker

B. DeCleene

Report and Recommendations

To: The Performance-Based Operations Aviation Rulemaking Committee (PARC)

From: The RVSM LOA Process Enhancement Team (PET)

Madison Walton (FAA) and David T. Norton (Industry), Co-Chairs

Date: May 16, 2013

Re: Report and Recommendations

I. Background Information

- 1. The PARC created the PET in April of 2012 with the following Statement of Objective: "Representatives of the U.S. general aviation industry have identified some portions of the process to obtain Letter of Authorization (LOA), Operations Specification (OpSpec), or Management Specification (MSpec) to operate in airspace where Reduced Vertical Separation Minimum (RVSM) is implemented that they would like the FAA to address in order to streamline the process."
- 2. The PET was given the following Statement of scope of task/activity: "The Code of Federal Regulations and international standards require authorization of operators to fly in airspace in which RVSM is implemented. 14 CFR 91 Appendix G contains the requirements that must be complied with. Advisory Circular 91-85 provides a means of compliance. Authorization process job aids are provided on the FAA RVSM Documentation web site. An Action Team should be established of FAA RVSM SMEs and industry representatives. The team should review the portions of the authorization process."
- 3. The PET was further charged with developing the following two deliverables or products:
- "1. Evaluate various options to improve the RVSM authorization process and develop recommended enhancements to the RVSM authorization process.
- "2. Summary report providing rationale and reasons behind the Action Team's recommendations."
- 4. Section II of this report provides the PET's recommended enhancements to the RVSM authorization process in fulfillment of its first charged deliverable. The following information is offered in fulfillment of the PET's second charge, the rationale and reasons behind the PET's recommendations:

Report and Recommendations:
RVSM LOA Process Enhancement Team to the
Performance-Based Operations Aviation Rulemaking Committee

- 1. On 20 January 2005, RVSM was implemented in all of the domestic airspace in the lower 48 states, Alaska, the San Juan FIR and the Gulf of Mexico and Atlantic High Offshore Airspace. Prior to this implementation of RVSM, the vast majority of U.S. registered and operated aircraft had not been impacted by the requirement to be authorized to operate between FL 290 and FL 410 inclusive, since RVSM had only been implemented in the North Atlantic and Pacific oceanic airspace and European domestic airspace. For the first time, all aircraft needed to be configured and inspected to ensure the applicable RVSM performance requirements were being met and all operators needed develop RVSM aircraft maintenance and pilot training programs or procedures—and the FAA needed to oversee and inspect those programs or procedures—in order ensure that RVSM aircraft could be safely operated in RVSM airspace.
- 2. Over the past ten years, most aircraft that routinely operate between flight level 290 and flight 410 have been upgraded (or are being manufactured) to appropriate RVSM designs, most operators have developed appropriate RVSM maintenance and pilot training programs, and the initial "one-size-fits-all" approach is now inadequate. Additionally, some operators have experienced inconsistent standards being applied among FSDO offices. Some have also experienced processing delays for aircraft previously approved for RVSM when there have only been administrative changes to the initial authorization such as operator name changes or changes to aircraft basing locations.
- 3. The initial evaluation and authorization process methodically processed each element requirement for authorization. Now that the initial implementation phase for RVSM compliance has passed, many new applicants are no longer new entrants to the system, and most aircraft have either previously met RVSM authorization requirements or are being designed and manufactured to do so, it has become apparent that it is appropriate to develop a more differentiated system to allow for the appropriate level of review and approvals in the RVSM authorization process. It will be imperative, however, that both aircraft operators and the FAA continue to ensure the safety of RVSM airspace operations while significantly enhancing the efficiency and timeliness in the aviation industry's ability to request RVSM authorizations and the FAA's ability to process those requests.
- 4. The PET has therefore created a detailed set of recommendations that improve efficiency. The core of these recommendations revolves around the recognition of the three key elements of any RVSM authorization—a properly-equipped aircraft, an appropriate maintenance program, and properly trained aircrew—and a "decision matrix" that will allow both industry members and the FAA to most efficiently direct their attention to only those elements that require review.
- 5. The recommendations set forth in this report are not designed to negate or replace the existing policy and guidance with respect to RVSM authorizations—those policies and that guidance remains intact with respect to the requirements for the ability to operate in RVSM airspace. Rather, these recommendations are designed to enhance this process in an

attempt to make it more appropriate and efficient, benefitting both the FAA and the aviation industry, all without sacrificing safety.

6. Finally, it is not the intent that these recommendations in any way negate or cause the reevaluation of any previously-issued RVSM authorizations. Instead, the specific intent is that these recommendations and procedures be adopted only as operators seek new or amended RVSM authorizations subsequent to the publication of these recommendations.

II. Initial Report and Recommendations

- 1. The PET recommends that the FAA adopt new procedures and guidance as set forth in the proposed new FAA Order 8900.1, Volume 4, Chapter 10, Subparagraphs 4-1231 through 4-1238 (with the remaining subparagraphs unchanged), which is attached in Attachment 1 to this report.
- 2. The PET further recommends that all remaining initial and/or additional guidance be reviewed and conformed, as appropriate, to allow for the implementation of the RVSM Decision Matrix as set out above, which may include the creation of additional appropriate job aids, templates or temporary worksheets in order to better facilitate the FAA's and industry's use of the matrix. Members of the PET have volunteered to continue their efforts on developing such job aids, templates or voluntary worksheets. It is important to note that while there was overall consensus on the development of these recommendations, there were some individuals who felt that a specific checklist or worksheet should have been developed and referenced within the guidance rather than treating it as a second product or item separate from this report and the recommended guidance.
- 3. Finally, the PET recommends that it create a definitive and multi-channel public-awareness and distribution effort in order to disseminate and implement this information as widely and quickly as possible, acknowledging current budget constraints. This will most likely include the FAA's normal distribution channels with respect to new guidance, as well as a partnering with the aviation industry in the conduct of public forums to discuss these concepts.

END.

Attachment 1

Report and Recommendations of the PET to the PARC

Proposed New FAA Order 8900.1, Volume 4, Chapter 10, Subparagraphs 4-1231 through 4-1238

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VOLUME 4 AIRCRAFT EQUIPMENT AND OPERATIONAL AUTHORIZATIONS

CHAPTER 10 EVALUATE OPERATOR'S APPLICATION TO CONDUCT FLIGHT IN REDUCED VERTICAL SEPARATION MINIMUM AIRSPACE

Section 1 Evaluate an Operator's Application to Conduct Flight in Reduced Vertical Separation Minimum Airspace

4-1231 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Operations: 1411 and 1413.

B. Maintenance: 3411 and 3413.

C. Avionics: 5411 and 5413.

D. Air Transportation Oversight System (ATOS) Element: 5.1.9.

4-1232 OBJECTIVE. This chapter provides guidance for evaluating applications for an operator to conduct flight in airspace where Reduced Vertical Separation Minimum (RVSM) is applied; evaluating and approving RVSM maintenance programs associated with an application; and issuing operations specifications (OpSpecs) or a letter of authorization (LOA), as appropriate. Both OpSpecs and LOAs are issued using the Web-based Operations Safety System (WebOPSS) (see Volume 3, Chapter 18, Section 2).

4-1233 **GENERAL**.

- **A. Requirements.** The current regulation in Title 14 of the Code of Federal Regulations (14 CFR) part 91 appendix G states the requirements an operator and the operator's aircraft must comply with in order for a person to operate a civil aircraft of U.S. registry in RVSM airspace.
- **B.** Authorization. Aircraft and operators must be authorized by the Administrator to conduct operations in RVSM airspace. The criteria evaluated to issue this authorization consist of three basic elements:

- 1) An aircraft must be determined to comply with the requirements of part 91 appendix G, section 2.
- 2) The operator's maintenance program must be found to comply with the requirements of part 91 appendix G, section 3.
- **3)** The operator must be found to have adopted RVSM operating policies and procedures for pilots (and, if applicable, dispatchers) that are acceptable to the Federal Aviation Administration (FAA).

C. Background.

- 1) Beginning with full RVSM implementation in all of the domestic airspace in the lower 48 states, Alaska, the San Juan FIR and the Gulf of Mexico and Atlantic High Offshore Airspace on 20 January 2005, for the first time all U.S. registered aircraft needed to be configured and inspected to ensure the applicable RVSM performance requirements were being met, and all operators needed to develop applicable RVSM procedures or order to safely operate their aircraft in RVSM airspace.
- 2) Since full RVSM implementation beginning in 2005, most operators have now developed appropriate RVSM maintenance and pilot knowledge or training programs, and the initial "one-size-fits-all" approach is now unwarranted and inadequate with respect to the processing of new RVSM authorizations. Additionally, there has been a lack of consistency and various levels of quality with respect to documentation submitted by RVSM applicants, as well as some processing delays and inconsistent standards being applied among FSDO offices.
- 3) This guidance has therefore been modified to create additional guidelines that improve efficiency in the authorization process. The core of these guidelines are the recognition of the three key elements of any RVSM authorization—an RVSM-Compliant Aircraft (see subparagraph 4-1234C), an RVSM-Approved Maintenance Program (see subparagraph 4-1235C), and properly trained aircrew who have met applicable RVSM-Knowledgeable Pilots requirements (see subparagraph 4-1236B)—and a "decision matrix" (see subparagraph 4-1237) that will allow the FAA to more efficiently direct attention to only those elements that require initial review. An RVSM-Compliant Aircraft, an RVSM-Approved Maintenance Program, and RVSM-Knowledgeable Pilots, as each are defined in the above referenced subparagraphs, are also referred to in this guidance individually or together as an "RVSM Authorization Element" or the "RVSM Authorization Elements."
- 4) The new guidelines set out in this chapter are not designed to negate or replace other existing policy and guidance with respect to RVSM authorizations, but are designed to make the RVSM authorization process more efficient.
- 5) The new guidelines set out in this chapter do not negate or cause the reevaluation of any previously-issued RVSM authorizations to be conducted. Instead, the new procedures

should be adopted only as operators seek new or amended RVSM authorizations subsequent to the publication of these modified guidelines.

D. Responsibilities.

- 1) Using the procedures set out in subparagraph 4-1237, the appropriate Flight Standards District Office (FSDO) or certificate-holding district office (CHDO) manager, in coordination with avionics/maintenance Airworthiness aviation safety inspectors (ASI) and Operations ASIs, should coordinate the evaluation of the aircraft RVSM eligibility, RVSM maintenance program, and operator's RVSM program.
- 2) The principal avionics inspector (PAI) and the principal maintenance inspector (PMI) will make the determination of whether or not the aircraft meets the requirements of an RVSM-Compliant Aircraft.
- **3)** Either the PAI or PMI will evaluate whether the operator's proposed maintenance program meets the requirements of an RVSM-Approved Maintenance Program (see subparagraph 4-1235).
- 4) The principal operations inspector (POI) will evaluate and make the determination of whether operator's pilots meet the knowledge requirements of 14 CFR part 91 Appendix G, as defined as RVSM-Knowledgeable Pilots and further described in subparagraph 4-1236.
- 5) The FSDO or CHDO, will issue an OpSpec, MSpec or LOA, as appropriate, to authorize an operator to conduct flight in RVSM airspace.

NOTE: The ASI may become knowledgeable of any other existing authorizations or specifications issued to a specific aircraft using the Operator Aircraft Viewer Report, available in the WebOPSS.

6) As further described in subparagraph 4-1237, the applicant will obtain and submit all documents that establish the eligibility of its aircraft as an RVSM-Compliant Aircraft. Operators are encouraged to use the [JOB AID IN SUB-PARAGRAPH]. Operators should contact the PAI/PMI to discuss early in the application process what documents may be needed to establish eligibility of an aircraft. The applicant will submit to the FAA evidence that it is capable of operating and maintaining each aircraft or aircraft group for which it applies, and an RVSM maintenance program for acceptance as an RVSM-Approved Maintenance Program. The applicant will establish that each pilot has adequate knowledge of RVSM requirements and procedures through submission and acceptance of RVSM-Knowledgeable Pilots.

4-1234 AIRCRAFT ELIGIBILITY.

A. Compliance for Authorization. An aircraft may be authorized to conduct RVSM operations if the Administrator finds that it complies with the requirements of part 91 appendix G, section 2. Aircraft may be produced RVSM-compliant or brought into compliance

through the application of FAA-approved Service Bulletins (SB), Service Letters (SL), or Supplemental Type Certificates (STC) that apply to the specific aircraft type or group and, if applicable, the specific aircraft serial number.

- **B. Requirements for Eligibility.** The PAI or PMI makes the determination of aircraft RVSM eligibility after reviewing substantiating documents developed to meet the following applicable requirements.
- 1) Aircraft not produced under type certificate (TC) in accordance with 14 CFR part 21, § 21.123 to meet requirements as stated in part 91 appendix G. The PAI and the PMI ensure that the inspections and/or modifications required to meet the specified performance have been performed and documented. At a minimum, these items should include STC installation on the specific serial numbered aircraft; Aircraft/Airplane Flight Manual Supplement (AFMS) (AFMS statement of RVSM capability); instructions for continued airworthiness (ICA); and aircraft logbook information that reflects the STC installation and ICA compliance.
- 2) Aircraft produced under TC in accordance with § 21.123 to meet requirements as stated in part 91 appendix G. The PAI/PMI ensures that the Aircraft Flight Manual (AFM) or aircraft Type Certificate Data Sheet (TCDS) denotes the RVSM eligibility and that the appropriate Manufacturing Inspection District Office (MIDO) has performed the initial finding of conformity with type design.

NOTE: The PAI/PMI may accomplish the determination that an aircraft is RVSM-compliant through the examination of only documents and/or data. Physical inspection of an airframe may not be required if the submitted documentation is sufficient.

C. RVSM-Compliant Aircraft. Upon determination that an aircraft is RVSM-compliant, the PAI/PMI will make the appropriate PTRS entry and notify the applicant in writing. The U.S. RVSM Approvals database lists aircraft found to be RVSM-compliant. Refer to paragraph 4-1241 for a complete explanation of PTRS entry content and the associated job aid. If (1) a subsequent applicant seeks a new authorization for the operation of an aircraft that has been previously determined by the FAA to be an RVSM-Compliant Aircraft, (2) the new RVSM authorization applicant provides a written statement of compliance documenting that no modifications have been made to the aircraft that would change its status as an RVSM-Compliant Aircraft, and (3) no other information is provided or comes to light that calls into question the status of the aircraft as an RVSM-Compliant Aircraft, then the PAI/PMI should designate that aircraft as an RVSM-Compliant Aircraft with respect to the new applicant.

NOTE: An aircraft retains its status as an RVSM-Compliant Aircraft only so long that aircraft continues to conform to its RVSM approved design, and continues to meet all applicable maintenance requirements. Therefore, an integral component of meeting item number 2 above – a compliance statement that the status of the aircraft has not changed – should affirmatively state that the aircraft

does in fact have the same required equipment, has met all scheduled and unscheduled maintenance requirements, and so forth.

4-1235 MAINTENANCE PROGRAM.

- **A. Application for Authorization.** The application for authorization to operate within RVSM airspace must include an approved RVSM maintenance program. This program must outline procedures to maintain aircraft in accordance with the requirements of part 91 appendix G.
- B. Develop and Obtain Approval. Operators without an approved aircraft maintenance program are required to develop and obtain approval of an RVSM maintenance program (an "RVSM-Approved Maintenance Program"). The aircraft RVSM design holder's Instructions for Continued Airworthiness (ICA) provides the basis of an RVSM-Approved Maintenance Program. Individual aircraft may include additional requirements or changes in their programs. An RVSM-Approved Maintenance Program is not required to include elements not related to RVSM maintenance. Inspection programs such as an Approved Aircraft Inspection Program (AAIP) or manufacturer's recommended inspection program do not satisfy the RVSM requirements because they do not contain procedures to maintain RVSM aircraft. Operators who maintain their aircraft under a Continuous Airworthiness Maintenance Program (CAMP) may choose to incorporate the RVSM maintenance requirements into the program. Part 121 operators currently under ATOS should develop RVSM maintenance programs using the Safety Attribute Inspection (SAI) job aid 5.1.9.
- C. Approval. The ASI will indicate approval of the RVSM-Approved Maintenance Program. An applicant may design its own program and submit it for approval. An applicant may also submit a previously approved program for approval. An applicant that has contracted with a person that is employing an RVSM-Approved Maintenance Program may request authorization to maintain the aircraft using that previously approved program. If the applicant makes such a request, the applicant must provide a copy of the applicable RVSM-Approved Maintenance Program and a written statement documenting that the aircraft will continued to be maintained under that RVSM-Approved Maintenance Program. This may be accomplished by listing the means the aircraft became compliant, any applicable modifications, and compliance of maintenance bulletins or the equivalent. In such event, so long as no other information is provided or comes to light that calls into question the ability to continue to maintain the aircraft under the previously approved RVSM-Approved Maintenance Program, the PAI/PMI should accept the applicant's use of that RVSM-Approved Maintenance Program.

NOTE: As an additional alternative for obtaining an approved maintenance program, an applicant requesting authorization for a newly built aircraft, incorporating an RVSM-compliant design, that has been maintained under the Aircraft Manufactures Recommended Maintenance Procedures (ICAs), and not modified from its design, may submit those procedures as previously approved by

the FAA, and no further review will be required. The submitted procedures will constitute an RVSM-Approved Maintenance Program for the applicant.

- **D. RVSM-Approved Maintenance Program Components.** Each RVSM-Approved Maintenance Program must include the following:
- 1) Identification of RVSM critical components and identification of structural areas noted as RVSM critical areas.
- 2) The method the operator will use to ensure that all personnel performing maintenance on the RVSM system are properly trained, qualified, and knowledgeable of that specific system.
- 3) The method the operator will use to ensure conformance to the RVSM maintenance standards including the use of calibrated and appropriate test equipment, and a quality assurance (QA) program for ensuring the continued accuracy and reliability of test equipment, especially when outsourced.
- 4) The method the operator will use to verify that components and parts are eligible for installation in the RVSM system, as well as preventing ineligible components or parts from being installed.
- 5) The method the operator will use to return an aircraft to service after an appropriately rated person has performed maintenance on an RVSM component/system or after the aircraft was determined to be noncompliant.

NOTE: Maintenance providers may use built-in test equipment (BITE) testing of RVSM components and systems recommended by manufacturers and design holders in appropriate ICAs for return to service (RTS) determinations.

6) Periodic inspections, functional flight tests, and maintenance and inspection procedures with acceptable maintenance practices for ensuring continued compliance with the RVSM aircraft requirements.

NOTE: The operator may list these elements in detail or describe them by reference to an acceptable program that identifies and controls through a revision or issue number.

NOTE: Functional flight testing, if required by the ICAs, may be accomplished through monitoring heightkeeping performance.

NOTE: The RVSM minimum monitoring requirements described in paragraph 4-1236 are operational requirements and are not considered part of the aircraft maintenance program.

- 7) The maintenance requirements listed in the ICA associated with any RVSM associated component or modification.
- **8)** Any other maintenance requirement that the operator needs to incorporate to ensure continued compliance with RVSM requirements.

NOTE: The aircraft RVSM design holder's Instructions for Continued Airworthiness (ICA) provide the basis for RVSM-Approved Maintenance Program components D1, D6, D7, and D8 listed in this subparagraph 4-1235(D). These components are addressed in the manufacturers recommended maintenance procedures for a standard configuration aircraft. Components D2, D3, D4, and D5 listed in this subparagraph 4-1235(D) address how maintenance is performed and/or documented. These components may be addressed through compliance with 14 CFR Part 43 requirements.

E. RVSM Requirements. Operators using the services of part 145 certificated repair stations (CRS) must include provisions to ensure that the repair station meets the requirements of their RVSM programs.

4-1236 OPERATOR EVALUATION.

- A. Person with Operational Control to Obtain RVSM Authorization. It is the RVSM applicant's responsibility to submit a request for RVSM authorization in the name of the person that will have operational control of the aircraft. It is *not* the responsibility of the FSDO or a specific ASI to determine legal ownership or operational control of an aircraft with respect to an RVSM authorization, and if any question arises with respect to these issues, then the FSDO should refer such questions to the appropriate FAA regional counsel's office. The following general information, however, may be useful in assisting the FSDO, as well as an RVSM applicant, in determining if the appropriate party has been properly designated as the legal operator with respect to the RVSM authorization request:
 - For commercial and fractional ownership program operations conducted under parts 125, 135 and/or 91K, the authorization applicant and holder should be the operating certificate holder, air carrier certificate holder or fractional ownership program manager, in which event the authorization will be issued in the form of an appropriate OpSpec or MSpec.
 - For non-commercial operations conducted under part 91 and part 125 (A125 LODA holders), the authorization applicant and legal operator should normally be one of the following persons, in which event the authorization will be issued in the form of an appropriate LOA:
 - A registered owner of the aircraft that is operating the aircraft incidental to its own non-air transportation business or personal activity;

- A person that has assumed operational control of the aircraft through a lease or use agreement for that person's operation of the aircraft incidental to that person's own non-air transportation business or personal activity.
- The legal operator will generally not be an owner trustee that is not operating the aircraft for its own business, a management company that has not accepted a transfer of operational control from the operator, or a holding company or bank that holds title to the aircraft solely for the purpose of leasing or transferring operational control of the aircraft to other persons.

NOTE: It is both possible and common for many aircraft being operated under parts 91, 91K, 125 and/or 135 to be operated by multiple operators on different occasions over a short period of time and on a non-exclusive basis (for example, multiple dry leases for the use of any one aircraft can be in place at one time). In such instances each individual operator is required to have an appropriate RVSM authorization issued in its own name in order for that operator to have access to RVSM airspace.

- **B. RVSM-Knowledgeable Pilots.** To obtain authorization from the Administrator to conduct operations in RVSM airspace, the Administrator must find the operator to have adopted RVSM operating policies and/or procedures for pilots (and, if applicable, dispatchers) and ensure each pilot has adequate knowledge of RVSM requirements, policies, and procedures ("RVSM-Knowledgeable Pilots").
- 1) For an applicant that is operating only under part 91, demonstrating that it has RVSM-Knowledgeable Pilots will consist of providing sufficient evidence that each pilot has an adequate knowledge of RVSM requirements, policies and procedures as required in 14 C.F.R. part 91, Appendix G, Section 3(c)(2).
- 2) For an applicant who operates under 14 CFR part 91K, 121, 125 or 135, in addition to meeting the adequate knowledge requirements for part 91 operators, that applicant will need to provide sufficient evidence of initial and recurring pilot training requirements as well as policies and procedures that will allow the operator to conduct RVSM operations safely as required in 14 C.F.R. part 91, Appendix G, Section 3(b)(2) and (3) in order to demonstrate that they are using RVSM-Knowledgeable Pilots.
- 3) If (1) a subsequent applicant seeks a new authorization for the operation of an aircraft in RVSM airspace and that operator is using pilots (and dispatchers where required) that have been previously determined by the FAA to be RVSM-Knowledgeable Pilots, (2) the new applicant provides a written statement of compliance documenting that the pilots they propose using still meet the requirements with respect to their status as RVSM-Knowledgeable Pilots and that the new applicant will be conducting the same type of operations as applied to the previously adopted RVSM-Knowledgeable Pilots, and (3) no other information is provided or comes to light that calls into question whether the pilots have retained their status as RVSM-Knowledgeable

Pilots for the type of operation to be conducted, then the POI should accept those pilots as meeting the RVSM-Knowledgeable Pilots requirement with respect to the new applicant.

- **C.** Additional Requirements to Obtain Authorization. In addition to the requirements set forth in subparagraph 4-1236B, the RVSM authorization applicant must meet the following requirements:
- 1) The minimum equipment list (MEL), if used, must incorporate the required changes stated in Master Minimum Equipment List (MMEL) GC-59 (formerly Policy Letter PL-84), dated August 15, 1997.
- 2) The RVSM authorization applicant must provide a procedure for initial aircraft monitoring and meeting RVSM minimum monitoring requirements.
- 3) The RVSM authorization applicant must also provide the method the operator will use to notify the crew if the aircraft has been restricted from RVSM, but is Airworthy for an intended flight.

NOTE: Elements C2 and C3 address how maintenance is performed. These elements may be addressed through compliance with 14 CFR Part 43 requirements.

- **D. Required Monitoring.** Operators that have been issued an U.S. RVSM authorization are required to have their aircraft RVSM height monitored, in accordance with the RVSM Minimum Monitoring Chart, every two years or within intervals of 1,000 flight hours, whichever period is longer.
- 1) Operators are not required to complete the height monitoring requirements prior to being granted operational approval. However, operators that cannot show evidence of the last successful height monitoring, or the height monitoring for the aircraft is out of date, have six months from the date the authorization is issued to meet the monitoring requirement.
- **2)** Evidence of previous successful monitoring of an aircraft transfers to a new owner and/or operator and may be used to meet the monitoring requirements.
- 3) When calculating the 1000 hour provision of the minimum monitoring requirement the calculation of the flight time should be from the last valid monitoring date on record. Flight Log book data should be sufficient to meet this element.
- **4)** See FAA 8900.1, Volume IV, Chapter 1, Section 5 for additional information regarding RVSM Monitoring. The RVSM Minimum Monitoring Chart can be found in the Monitoring Section of the FAA RVSM Documentation Webpage.
- **E. Responsible Person for RVSM Authorizations.** For 14 CFR part 91 RVSM applicants, the application for authorization to operate within RVSM airspace must include the

designation of either one Responsible Person or of one RVSM Authorized Representative and one RVSM Point of Contact, as follows:

- 1) The person(s) designated under this subparagraph 4-1236E should be (a) the individual person who will be the operator, or, if the operator is a legal entity, then an officer, employee or person who that entity has contracted with in order to act on behalf of the legal entity with respect to the RVSM authorization, and who has adequate knowledge of RVSM requirements, policies and procedures; and (b) a person who has been designated by the operator to act as a contact person, and who has actual day-to-day knowledge of the RVSM-Compliant Aircraft operations and maintenance status, that the FAA may contact to gather such information when such a need arises.
- 2) The operator may use one individual to fulfill both roles as described in subparagraph 4-1236E(1) (a) and (b) above, or the operator may elect to designate separate persons to fulfill these roles. If the operator chooses to use one individual, then that person will be designated as the "Responsible Person." If the operator chooses to use separate individuals, then the person fulfilling the role described in subparagraph 4-1236E(1)(a) will be designated as the "RVSM Authorized Representative," and the person fulfilling the role described in subparagraph 4-1236E(1)(b) will be designated as the "RVSM Point of Contact."
- **3)** If the applicant uses one individual to meet the requirements of subparagraph 4-1236E(1) above, then the Responsible Person will sign LOA B046.
- **4)** If the applicant elects to name both an RVSM Authorized Representative and a different RVSM Point of Contact, then the RVSM Authorized Representative will sign LOA B046 or LOA D098, as appropriate.
- 5) In any event, the Responsible Person, RVSM Authorized Representative and/or the RVSM Point of Contact should not be a person that does not have on-going knowledge of the operations of the aircraft under the RVSM authorization.
- 6) Additionally, it generally is not appropriate to designate an "Agent for Service of Process" with respect to RVSM authorizations that are being issued to part 91 and part 125 operators (A125 LODA holders).
- **F. Coordination.** The appropriate FSDO or CHDO manager, in coordination with the PAI, PMI, and POI, will issue the OpSpecs, MSpecs or LOA after determination of an RVSM-Compliant Aircraft; approval of the RVSM-Approved Maintenance Program; and acceptance of operator RVSM-Knowledgeable Pilots requirements. Upon issuance, the POI will make the appropriate PTRS entry (see Table 4-23). The U.S. RVSM Approvals database lists authorizations issued to operators.

NOTE: A PAI, PMI, or POI may sign for the manager (when authorized) OpSpecs, MSpecs and LOA paragraphs issued using WebOPSS.

4-1237 RVSM DECISION MATRIX.

- A. RVSM Applicant Procedures. Any applicant for an administrative change to an existing RVSM authorization should submit such documentation as is called for in Group I of the RVSM Decision Matrix described in subparagraph 4-1237C. Any applicant for a new RVSM authorization should submit sufficient documentation establishing that it will use an RVSM-Compliant Aircraft, RVSM-Approved Maintenance Program, and RVSM-Knowledgeable Pilots. If the applicant is submitting a new application that does not rely on any previously accepted RVSM Authorization Element, then the application will be processed in accordance with Group III of the decision matrix. If the applicant seeks to rely on one or more previously accepted RVSM Authorization Elements, that applicant should review Group II of the decision matrix to determine what additional information should be provided, as applicable, with respect to the proposed use of a previously accepted RVSM Authorization Element in order to benefit from the efficiencies created by the matrix.
- **B. FSDO Approval Procedures.** Once an applicable CHDO or FSDO has received a written request for service from an applicant for a new RVSM authorization, that FSDO will process that request using the following general guidance:
- 1) Determine which of the Authorization Groups in the RVSM Decision Matrix in subparagraph 4-1237C applies. For example, if a new applicant who has not operated in RVSM airspace, has been issued an RVSM authorization, and is not utilizing an aircraft, maintenance program and pilots that have previously been the basis for an RVSM authorization submits a request, then Authorization Group III of the RVSM Decision Matrix will most likely apply, and a full review and authorization process should be followed. Otherwise, the FSDO should apply the procedures related to the most applicable of the remaining Authorization Groups I II in order to process and issue the RVSM authorization or RVSM authorization amendment in the most efficient manner possible.
- 2) In the event an existing RVSM authorization holder seeks to move its RVSM authorization to a new controlling FSDO, or a new RVSM authorization applicant submits an application to a FSDO that includes the use of one or more existing RVSM Authorization Elements that have been previously accepted by a different FSDO, then the requested FSDO should adopt and accept those previously accepted RVSM Authorization Elements absent any information provided as part of the application that raises questions or concerns with respect to the on-going validity or applicability of those previously accepted RVSM Authorization Elements.
- 3) Although guidance has been created in order to allow for the most efficient processing of an RVSM authorization request as possible without sacrificing operational safety, and a safety inspector may rely on this guidance in issuing new or amended RVSM authorizations, each FSDO, CHDO, POI, PAI, PMI and/or ASI retains the authority to conduct as much review and research with respect to any proposed RVSM-Compliant Aircraft, RVSM-

Approved Maintenance Program or RVSM-Knowledgeable Pilots requirements as is warranted in order to ensure safety and regulatory compliance requirements have been met.

C. RVSM Decision Matrix. Each RVSM authorization applicant and each FSDO that has received an RVSM authorization request will use the following matrix, in conjunction with the definitions and procedures with respect to the RVSM Decision Matrix and RVSM Authorization Elements described in subparagraphs 4-1234, 4-1235 and 4-1236 above, in order to request and process the applicable RVSM authorization application:

RVSM DECISION MATRIX

AUTHORIZATION GROUP I:

RVSM AUTHORIZATION AMENDMENTS

- The following changes are considered to be administrative in nature only, and do not require the issuance of a new RVSM authorization, nor do they require a new inspection.
- This group *only* applies in circumstances where a previously authorized RVSM operator and each of the previously accepted RVSM Authorization Elements *are remaining the same*.

I. A. Examples of Requested Action / Nature of Change

- 1. Change in the primary business address of an RVSM-Compliant Aircraft and/or RVSM authorization holder.
- 2. Change in an existing RVSM operator's designated Responsible Person (or RVSM-Authorized Representative or RVSM-Point of Contact).
- 3. Change in the registration markings of an RVSM-Compliant Aircraft being operated by an existing RVSM authorization holder.
- 4. Removal of an RVSM-Compliant Aircraft from an existing RVSM authorization that has multiple RVSM-Compliant Aircraft listed.

I. B. Applicable Steps and Information Required from RVSM Authorization Applicant

- Prior to making a service request for an authorization amendment, each existing authorization holder should make a positive determination that none of the previously accepted RVSM Authorization Elements forming the basis for the existing RVSM authorization are changing.
- 2. That authorization holder should then submit a written request to the controlling CHDO that:
 - a. States which of the applicable administrative changes are occurring;
 - b. Further affirmatively states that none of the previously accepted RVSM Authorization Elements that formed the basis for the initial issuance of the affected RVSM authorization have changed or are changing; and
 - c. Requests the issuance of an amendment to the existing RVSM authorization that acknowledges the administrative change being made.
- 3. If the nature of the requested amendment is to change the primary business address from one CHDO service area to another, it must notify, in writing, the losing (previously responsible) CHDO of the new physical location and mailing address within 30 calendardays following relocation. The losing CHDO must request that the WebOPSS Help Desk move the operator's database to the appropriate receiving CHDO. The losing CHDO must also notify the receiving CHDO of the change. The receiving CHDO should then update and reissue the operator's A001 template to reflect the new address, and the receiving CHDO becomes the responsible CHDO for processing new LOAs for that operator.
- **4.** The authorization holder should also provide such further information as the CHDO may request in order to efficiently process the request.

I. C. Applicable Procedures to be Followed by the Appropriate CHDO

- Review the request and supporting documentation received from the RVSM authorization applicant to determine if it appears that an amended RVSM authorization amendment is warranted.
- 2. Re-issue the amended RVSM authorization that is identical to the initial RVSM authorization in all respects other than reflecting the new amended information; and
- 3. If the nature of the requested amendment is to change the primary business address from one FSDO service area to another, see the additional applicable guidance in FAA Order 8900.1, Volume 3, Chapter 2, Section 2.

4. If an existing RVSM authorization holder has made a written affirmation that none of the underlying previously accepted RVSM Authorization Elements has changed or will change, and there is no other information provided to the FSDO raising any questions or concerns with respect to the on-going validity or applicability of those RVSM Authorization Elements, then, subject to subparagraph 4-1237A(3), the CHDO should issue the requested amendment without further inspections being required.

AUTHORIZATION GROUP II:

RVSM AUTHORIZATION BASED ON ONE OR MORE EXISTING APPROVED RVSM AUTHORIZATION ELEMENTS

- The following RVSM authorizations are new authorizations.
- This group will normally apply to a new or proposed RVSM operator that is seeking the
 issuance of an RVSM authorization for an aircraft that is already an RVSM-Compliant
 Aircraft or where the new RVSM operator will be utilizing a previously accepted RVSM

 —Approved Maintenance Program and/or previously accepted RVSM-Knowledgeable
 Pilots requirements with respect to its operations of that specific aircraft.

II. A. Examples of Requested Action / Nature of Change

- 1. There is a change in the legal status or identity of the business entity that is the Approved RVSM Operator, but the Responsible Person, RVSM Authorized Representative and/or RVSM Contact Person and each of the Approved RVSM Authorization Elements are remaining the same.
 - a. One example of this situation may occur where an operator is converted from an S-corporation to a limited liability company, for example, under applicable state law, but no other changes are occurring.
 - b. Another example may occur where the ownership and operation of an aircraft is transferred from one company to a legal affiliate, but there are no other changes occurring.
- 2. A new proposed RVSM operator will be using an existing RVSM-Compliant Aircraft, together with a previously accepted RVSM-Approved Maintenance Program and/or previously accepted RVSM-Knowledgeable Pilots requirements. Examples of this type of situation may include:

- a. An operator takes delivery of a newly-manufactured aircraft that is type certified as RVSM compliant. The operator provides a written statement that the manufacturer's approved RVSM maintenance program will be used without deviation.
- b. An Approved RVSM Aircraft is being operated under an RVSM Authorization issued to a part 135 air carrier, and the underlying owner or a separate lessee will occasionally use that specific aircraft while continuing to use and comply with the part 135 air carrier's RVSM-Approved Maintenance Program and/or the same RVSM-Knowledgeable Pilots requirements.
- c. A group of underlying owners or lessees use an RVSM-Compliant Aircraft, each maintaining their own operational control of that aircraft pursuant to a dry lease, while also utilizing the same previously accepted RVSM-Approved Maintenance Program and/or the same RVSM-Knowledgeable Pilots requirements.
- 3. An existing or new proposed Approved RVSM Operator seeks an RVSM Authorization and will be utilizing one or more existing Approved RVSM Authorization Elements.
 - a. An example may be where an existing RVSM operator seeks to add a new proposed RVSM-Compliant Aircraft to an existing RVSM authorization where that operator will continue to use an already accepted RVSM-Approved Maintenance Program (applicable to the specific RVSM design) and/or previously accepted RVSM-Knowledgeable Pilots requirements.

II. B. Applicable Steps and Information Required from RVSM Authorization Applicant

- 1. Make a positive determination that the existing or new proposed RVSM operator is seeking an RVSM authorization that will utilize at least one previously RVSM Authorization Element (i.e., an existing RVSM-Compliant Aircraft, an RVSM-Approved Maintenance Program, and/or RVSM-Knowledgeable Pilots requirements).
- 2. Submit a written request to the controlling CHDO that:
 - a. Provides complete documentation of an RVSM compliance program, including written information evidencing that the specific aircraft meets the requirements of an RVSM-Compliant Aircraft;
 - Further specifically states that an existing RVSM-Approved Maintenance Program and/or previously accepted RVSM-Knowledgeable Pilots requirements will be used with respect to the operation of the proposed Approved RVSM Aircraft in RVSM airspace, as applicable;

- Provides such additional information as necessary to evidence compliance with a new or different RVSM-Approved Maintenance Program and/or new or different RVSM-Knowledgeable Pilots requirements (or to be able to gain such approvals); and
- d. Asks for the issuance of an RVSM authorization that applies to the operation of the aircraft by that proposed RVSM operator.
- 3. Provide such further information as the CHDO may request in order to efficiently process the request.

II. C. Applicable Procedures to be Followed by the Appropriate CHDO

- 1. Review the request and supporting documentation received from the RVSM Authorization Applicant to determine if it appears that an the requested RVSM Authorization is warranted.
- 2. To the extent the RVSM applicant has provided written documentation evidencing that the operator will be using a previously accepted RVSM Authorization Element, and accept that RVSM Authorization Element as a valid basis for the issuance of the new RVSM authorization, and to the extent the applicant has presented a proposed RVSM Authorization Element that has not been previously reviewed and accepted, conduct such additional review and research with respect to that RVSM Authorization Element only as is required to issue the new RVSM authorization.
- 3. If an RVSM applicant has made a written affirmation that one or more of the underlying previously accepted RVSM Authorization Elements have not changed or will not change, there is no other information provided to the CHDO raising any questions or concerns with respect to the on-going validity or applicability of those RVSM Authorization Elements, and the applicant has otherwise presented sufficient evidence of compliance with the requirements of the remaining RVSM Authorization Elements, then, subject to subparagraph 4-1237A(3), the CHDO should issue the requested amendment without further inspections being required.

AUTHORIZATION GROUP III:

RVSM AUTHORIZATION NOT BASED ON ONE OR MORE EXISTING RVSM AUTHORIZATION ELEMENTS

• In the event a proposed new or existing Approved RVSM Operator seeks the issuance of an RVSM Authorization that will not be based on any existing RVSM Authorization Element, then neither Authorization Group I nor II above will apply, the proposed

Approved RVSM Operator should submit sufficient evidence to show its ability to comply with each of the RVSM Authorization Elements, and the CHDO should process the request as a new and unique request by reviewing all of the materials provided by the applicant to ensure that each of the RVSM Authorization elements have been met.

4-1238 COORDINATION REQUIREMENTS, REFERENCES, FORMS, AND JOB AIDS.

A. Coordination Requirements. This task requires coordination between Airworthiness and Operations ASIs.

B. References (current edition):

- Title 14 CFR Parts 43, 91, 121, 125, 135, and 145.
- Advisory Circular (AC) 91-85, Authorization of Aircraft and Operators for Flight in Reduced Vertical Separation Minimum Airspace.
- Volume 4, Chapter 1, Section 5, Special Navigation Areas of Operation.
- C. Forms. None.

D. Job Aids:

- SAI Job Aid 5.1.9.
- PTRS RVSM Data Entry Job Aid (see Figure 4-87)

END.