

those aircraft. We anticipate that the options for modifying aircraft to RVSM standards will continue to increase as the RVSM implementation date approaches.

2. A commenter was concerned that a large volume of non-group approvals will be required for types of aircraft that are used in general or business aviation. A related concern was that FAA Aircraft Certification Office resources would not be adequate to handle the demand.

*FAA Response:* We are identifying RVSM focal points for each of the Aircraft Certification Offices (ACO) to facilitate the process for RVSM compliance package approval. We recognize the potential increase in the volume of work required for aircraft used in general aviation or business aviation work and are preparing for it.

Our plan for proceeding with domestic RVSM implementation is based on proceeding with RVSM implementation when a significant majority of the flights are RVSM compliant. Based on experience in previous RVSM implementation programs, we recognize that a percentage of aircraft and operators may not be ready at the time of implementation.

3. A commenter expressed concern that FAA Flight Standards field office resources will be inadequate.

*FAA Response:* We recognize that Flight Standards (AFS) field offices will be required to assess a large volume of operators seeking RVSM authority. In preparation for RVSM, we are taking the following steps: First, AFS is enhancing and expediting communication between RVSM program leads at FAA Headquarters, in Regional Offices, in Flight Standards District Offices, and in Certificate Management Offices. Headquarters leads are meeting with already designated Regional program leads and RVSM focal points are being designated in each AFS field office. Second, AFS is enhancing existing guidance to make it clearer, more complete, and more user friendly. As an example, AFS is updating the RVSM documentation Web site to more specifically address issues related to operations under part 91. Third, AFS is working with regional offices to identify AFS field offices that may require additional support.

4. A commenter was concerned that there could be a limited availability of parts that would hinder an operators' capability to meet RVSM compliance standards.

*FAA Response:* In the course of planning the Domestic RVSM program, we raised the question of parts availability with aircraft and avionics

manufacturers. Parts availability was not cited as a problem in these discussions.

5. NATA stated that there is inadequate repair station capacity for the volume of aircraft to be worked on for RVSM compliance and that no formal survey of capacity had been conducted.

*FAA Response:* We have considered the availability of engineering facilities for small and large aircraft, and small and large operators. Many large operators use company owned and operated engineering facilities. Other operators use independent engineering facilities such as repair stations or aircraft manufacturer service centers. While we did not conduct a formal survey of engineering capacity, we did consult with operators and aircraft manufacturers to project the capability of operators to bring their aircraft into RVSM compliance by January 2005. We found the following:

- Some aircraft manufacturers and repair stations have expanded their engineering facilities to meet the demands of the RVSM program.
- In 2002 and 2003, aircraft manufacturer service center and repair station facilities were underutilized for RVSM work.
- Many operators are completing RVSM engineering during scheduled maintenance to avoid costs associated with removing them from service to complete RVSM work.

Based on consultation with the operator community, we have concluded that:

- A large percentage of aircraft operated by large airplane operators will be RVSM compliant by the January 2005 timeframe.
- If a large number of small aircraft operators plan to complete aircraft engineering work within the 12 month period prior to RVSM implementation, they will risk not having aircraft work completed by January 2005 and may have to operate below FL 290 until they obtain RVSM authority.

We project that RVSM compliant aircraft will conduct approximately 90 percent of flights by January 2005. We believe that it is in the best interest of the majority of operators to implement RVSM as soon as feasible.

6. NPRM proposal to allow turbo-propeller aircraft operated under part 91 to equip with a single RVSM compliant altimeter. Some NPRM commenters, including Cessna, supported the proposal while others, including ALPA and APA, opposed it. The FAA re-considered the NPRM proposal and published an SNPRM in February 2003 with a request for comment by April 14,

2003. The SNPRM proposed to withdraw the provision to allow turbo-propeller aircraft operated under part 91 to conduct RVSM operations using aircraft equipped with a single RVSM compliant altimeter. Most SNPRM comments supported withdrawing the proposal. However, two organizations opposed it. The SNPRM comments are summarized below with our response.

a. Most commenting organizations concurred with the proposal to withdraw the single RVSM-compliant altimeter provision.

*FAA Response:* In this final rule, we have not adopted the provision to allow turbo-propeller aircraft operated under part 91 to conduct RVSM operations using aircraft equipped with a single RVSM-compliant altimeter. For the past six years, standards applied worldwide have required aircraft to be equipped with two RVSM compliant altimeters. We have concluded that different criteria for turbo-propeller aircraft operated under part 91 to conduct RVSM operations should not be adopted.

b. Two commenters opposed withdrawal of the single RVSM compliant altimeter provision for part 91 turbo-prop aircraft. One commenter stated that operators should retain the ability to determine how their aircraft are equipped. That commenter also stated that standards for RVSM operations in the United States should not be affected by those adopted in other countries including those countries with airspace adjoining the U.S.

*FAA Response:* First, since March 1997, RVSM operations have been shown to be safe and beneficial in both oceanic and continental airspace. We believe it is critical to RVSM safety that aircraft used in RVSM operations comply with common standards for equipage, system error and performance. We have published those standards in part 91 Appendix G. Aircraft that have not complied with Appendix G have shown altitude-keeping errors that are incompatible with RVSM safety. Second, when new standards are adopted for operations such as RVSM, we believe that we must, to the extent possible, attempt to adopt standards that are common to neighboring countries and other countries worldwide. We have determined that adopting the single RVSM compliant altimeter provision would add unnecessary complications to air traffic control in the airspace that borders Canada and Mexico. Those countries have informed us that they will not adopt the provision. We also believe that it is in the best interests of U.S. operators and