

# Continued Airworthiness Program Requirements

Robert Swain

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# Aircraft RVSM Eligibility

## In-service Aircraft:

- Apply Service Bulletins, Service Letters, or STC to obtain compliance

## Most In-production/New-production Aircraft:

- Airplane Flight Manual contains statement of RVSM compliance or possibly listed on Type Certificate Data Sheet

# Airframe RVSM Compliance

Aircraft must be determined to comply with the requirements of part 91 Appendix G section 2

- FAA Inspector makes PTRS entry, with date of RVSM compliance in the Comment field.

*“determined compliant” = “airworthiness approval”*

- The FAA Technical Center (ACT-520) retrieves PTRS information and also forwards to international bodies

# Maintenance (Mx) Program Requirements

An approved RVSM continuous airworthiness (maintenance) program outlining procedures to maintain RVSM aircraft is required by the rule 14 CFR § 91.706 through reference to Appendix G of part 91

Proposed rule 14 CFR §91.180 will be added for DRVSM; retains reference to Appendix G of part 91

Part 91 Appendix G, Section 3 (Operator Authorization) calls for an approved RVSM Maintenance Program

# Documents

The maintenance program requirements are outlined in Part 91, Appendix G and a method of compliance is offered in 91-RVSM, paragraph 10

Additionally

91-RVSM 9b(8) calls for RVSM aircraft engineering package to contain any necessary Continued Airworthiness policies and procedures

# Documents (cont.)

FAA Airworthiness Inspector Bulletin FSAW 97-14 has provided inspector guidance for evaluation of RVSM maintenance programs

FAA Order 8300.10, Airworthiness Inspector's Handbook, (Change 16) in coordination.

Vol. 2, Chapter 5, Evaluate Operator's Application to Conduct Flight in Airspace Where Reduced Vertical Separation Minimums are Applied.

# Part 91 Appendix G, Section 3

Approved RVSM Maintenance program must contain:

- Periodic inspections, functional flight tests, maintenance and inspection procedures, acceptable maintenance practices
- Quality assurance program for test equipment
- Procedures for returning noncompliant aircraft to service

# Maintenance Program Requirements

- The name or title of responsible person
- Method to ensure personnel performing maintenance are properly trained, qualified, and knowledgeable of specific system
- Method operator will use to notify crew if aircraft is restricted from RVSM operation

# Maintenance Program Requirements

- Method to ensure conformance to RVSM maintenance standards
  - use of calibrated and appropriate test equipment
  - quality assurance program for continued accuracy and reliability of test equipment

These requirements may be satisfied through the use of FAA Certified Repair Stations with appropriate programs but remain the responsibility of the operator

# Maintenance Program Requirements

- Method operator will use to return an aircraft to service after maintenance
- Periodic inspections, functional flight tests, and maintenance and inspection procedures

Elements of program may be listed in detail or described by reference to an acceptable program that is identified and controlled by revision or issue number.

# Maintenance Program Requirements

## Functional Flight Tests

“The need for functional flight tests may be limited to only after repairs or modifications that are deemed to warrant such testing and may be accomplished through monitoring height-keeping performance.”

# Maintenance Program Requirements

- The maintenance requirements listed in Instructions for Continued Airworthiness (ICAs) for any RVSM component or modifications
- Any other maintenance requirement required to ensure continued compliance with RVSM requirements

# Maintenance Program Requirements

Operators using the services of FAA part 145 certified repair stations must include provisions to ensure their program requirements are met

Operators not required to have approved maintenance programs need only develop and obtain approval of a RVSM maintenance program

# Manual Requirements

- For operators under continued airworthiness program, separate RVSM manual or RVSM provisions incorporated into General Maintenance Manual are acceptable
- Inspection programs (AAIP or manufacturer's recommended) do not qualify
- For Part 91, 135 (9 or less) and 125 operators, separate approved RVSM Maintenance Manual is acceptable method of documenting program

# Program Approval

## Method of Approval:

- Program elements inserted into an accepted program will have approval indicated for each element or group of elements
- Stand-alone manuals will have cover page statement and succeeding pages stamped or initialed
- Other approval controls may be used

# 91-RVSM Guidance

## Paragraph 10 Content

### a. General

- Maintenance facilities
- Maintenance procedures

### b. Mx Program Approval Requirements

- Includes any maintenance requirements defined in approved data package

### c. Mx Document Requirements: review

- Maintenance, Structural Repair and Standard Practices Manuals; Illustrated Parts Catalogs, Mx Schedule and MEL

# 91-RVSM Guidance

## Paragraph 10 Content

### d. Mx Practices

- Equipment maintained IAW manufacturer instructions
- Modification or repair subject to design review
- Maintenance practices in critical area review
- BITE not acceptable for calibration or RTS
- Quick disconnects
- Airframe and static system IAW manufacturer instructions
- Skin waviness
- Existing maintenance requirements

# 91-RVSM Guidance

## Paragraph 10 Content

- e. Mx Practices for Non-compliant Aircraft
- f. Mx Training Requirements
  - Aircraft geometric inspection technique
  - Test equipment calibration/usage
  - Any special documentation or procedures
- g. Test Equipment
  - Standards- accuracy, calibration, use

# Conclusion

Continuous airworthiness programs are critical to acceptable aircraft altitude-keeping performance and to the overall safety of RVSM operations