

**Element Performance Inspection (EPI) Data Collection Tool**  
**5.1.9 RVSM Authorization (AW)**

**ELEMENT SUMMARY INFORMATION**

**Purpose of this Element** (certificate holder's responsibility):

- To ensure that the certificate holder conducts Reduced Vertical Separation Minimum (RVSM) operations safely and uses aircraft that are equipped, maintained, and capable of operating in RVSM airspace.

**Objective** (FAA oversight):

- To determine the effectiveness of the certificate holder's procedures in meeting the desired output of the process.
- To determine if the certificate holder follows its procedures, controls, process measurements, and interfaces for the RVSM Authorization process.
- To determine if there were any changes in the personnel identified by the certificate holder as having responsibility and/or authority for the RVSM Authorization process.

**Specific Instructions:**

- To accomplish this EPI, the Inspector shall verify the certificate holder follows its policies and procedures for its RVSM program, to include tooling utilized to maintain aircraft. The Inspector shall verify that only trained and qualified personnel perform maintenance on RVSM aircraft. The Inspector shall verify that technical data being used for RVSM is current. The Inspector shall verify that the certificate holder reports all systems failures/abnormalities with the RVSM system to the FAA Certificate Holding District Office.

**Related EPIs:**

- 1.1.1 Aircraft Airworthiness (AW)
- 1.1.2 Appropriate Operational Equipment (AW)
- 1.2.1 Airworthiness Release / Logbook Entry (AW)
- 1.2.2 Major Repairs and Alterations Records (AW)
- 1.2.3 Maintenance Log / Recording Requirements (AW)
- 1.2.4 MIS Reports (AW)
- 1.2.6 Aircraft Listing (AW)
- 1.3.1 Maintenance Program (AW)
- 1.3.2 Inspection Program (AW)
- 1.3.3 Maintenance Facility / Main Maintenance Base (AW)
- 1.3.4 Required Inspection Items (RII) (AW)
- 1.3.5 MEL / CDL / Deferred Maintenance (AW)
- 1.3.6 AD Management (AW)
- 1.3.7 Outsource Organization (AW)
- 1.3.8 Control of Calibrated Tools and Test Equipment (AW)
- 1.3.9 Engineering / Major Repairs and Alterations (AW)
- 1.3.10 Parts / Material Control / SUP (AW)
- 1.3.11 Continuous Analysis and Surveillance (CAS) (AW)
- 1.3.14 General Maintenance Manual / Equivalent (AW)
- 1.3.15 Reliability Program (AW)
- 1.3.19 Lower Landing Minimums (LLM) (AW)
- 1.3.20 Engine Condition Monitoring (AW)

- 1.3.21 Parts Pooling (AW)
- 1.3.22 Parts Borrowing (AW)
- 1.3.23 Short-Term Escalations (AW)
- 2.1.1 Manual Currency (AW)
- 2.1.2 Content Consistency Across Manuals (AW)
- 2.1.3 Distribution (Manuals) (AW)
- 2.1.4 Availability (Manuals) (AW)
- 4.1.1 RII Personnel (AW)
- 4.2.1 Maintenance Training Program (AW)
- 4.2.2 RII Training Requirements (AW)
- 4.4.1 Recency of Experience (AW)
- 4.4.2 Display of Certificate (AW)
- 4.4.3 Privileges Airframe and Powerplant (AW)
- 4.4.4 Privileges and Limitations for Repairmen (AW)
- 5.1.1 Line Stations (AW)
- 5.1.8 Extended Operations (ETOPS) (AW)

## SUPPLEMENTAL INFORMATION

### Specific Regulatory Requirements (SRRs):

- SRRs:
  - 119.43(b)
  - 119.43(b)(1)
  - 119.43(b)(2)
  - 119.43(c)
  - 121.135(a)(1)
  - 121.135(b)(1)
  - 121.135(b)(2)
  - 121.135(b)(3)
  - 121.367(b)
  - 121.375
  - 43.13(b)
  - 91.703(a)(4)
  - 91.706(a)(1)
  - 91 App..GSection 1
  - 91 App..GSection 2
  - 91 App..GSection 3(b)(1)
  - 91 App..GSection 3(b)(1)(i)
  - 91 App..GSection 3(b)(1)(ii)
  - 91 App..GSection 3(b)(1)(iii)
  - 91 App..GSection 3(b)(3)
  - 91 App..GSection 3(c)(1)
  - 91 App..GSection 6
  - 91 App..GSection 6(a)
  - 91 App..GSection 6(b)
  - 91 App..GSection 6(c)
  - B.046
  - B.046(c)
  - D.092

### Related CFRs & FAA Policy/Guidance:

- Related CFRs:  
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- FAA Policy/Guidance:  
FAA Order 8900.1, Volume 4, Chapter 10, Section 1

<b>EPI Section 1 - Performance Observables</b>	
<b>Objective:</b> The tasks and questions in this section of the data collection tool (DCT) are designed to assist the inspector in determining if the certificate holder follows its written procedures and controls and meets the established performance measures of the process. To accomplish this, questions have been generated to test both the outputs of the process as well as the process itself. Question 1 and its following subquestions are directed at the output(s) of the process, whereas questions 2-6, when answered, should be directed at the process itself.	
<b>Tasks</b>	
	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the information listed in the Supplemental Information section of this DCT.
2.	Review the policies, procedures, instructions, and information for the RVSM Authorization process.
3.	Review the last accomplished associated safety attribute inspection (SAI) for this element with emphasis on the controls, process measurements, and interface attribute section responses.
4.	Observe the RVSM Authorization process to gain an understanding of the procedures, instructions, and information.
5.	Discuss the RVSM Authorization process with the personnel (other than management) who perform the duties and responsibilities required by the process.

<b>Questions</b>		
	To meet this objective, the inspector must answer the following questions:	
1.	Determine whether the following performance measures were met:	
1.1.	Did the certificate holder comply with RVSM provisions of operations specifications D092?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.2.	Were personnel (including inspection personnel), who determine the adequacy of work, trained in accordance with the certificate holder's policies and procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.3.	Were personnel who perform maintenance on the RVSM systems properly trained, qualified, and knowledgeable in accordance with the certificate holder's manual?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.4.	Were the certificate holder's current RVSM technical documents available to RVSM maintenance personnel?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.5.	Did the certificate holder notify the CHDO of any system failures or abnormalities in accordance with its policies and procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.6.	Did the certificate holder audit the RVSM process to ensure its policies and procedures were followed? <i>Related Performance JTIs:</i> 1. Check at the air carrier specified location that operator and the operator's aircraft operated in RVSM airspace complied with the requirements of 14 CFR 91 Appendix G in accordance with the Certificate Holder's design. <i>Sources:</i> 121.135(b)(26); 91.706(a)(1) 2. Check at the air carrier specified location that functional flight tests were performed in accordance with the Certificate Holder's design. <i>Sources:</i> 121.135(b)(16); 91 App..GSection 3(b)(1)(i)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

	<p>3. Check at the air carrier specified location that the RVSM quality assurance program ensured continuing accuracy and reliability of test equipment used for RVSM aircraft in accordance with the Certificate Holder's design.</p> <p><i>Sources:</i> 121.135(b)(16); 91 App..GSection 3(b)(1)(ii)</p>	
1.7.	<p>Did the certificate holder's aircraft have the correct version of TCAS installed?</p> <p><i>Related Performance JTIs:</i></p> <p>1. Check at the air carrier specified location to assure that avionics units installed in each aircraft meet the minimum RVSM equipment requirements were of a different manufacturer or part number. The operator demonstrated that the equipment provided equivalent system performance in accordance with the Certificate Holder's design.</p> <p><i>Sources:</i> 121.135(b)(16); 91 App..GSection 1(c)(2)</p> <p>2. Check at the aircraft that Traffic Alert and Collision Avoidance System (TCAS) met TSO C-119b (Version 7.0), or a later version in accordance with the Certificate Holder's design.</p> <p><i>Sources:</i> 121.135(b)(1); 91 App..GSection 2(g)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.8.	<p>Did maintenance personnel follow the certificate holder's manual to verify that components and parts were eligible for installation in the RVSM system?</p> <p><i>Related Performance JTIs:</i></p> <p>1. Check at the air carrier specified location that avionics units installed in each aircraft meet the minimum RVSM equipment requirements were manufactured to the same manufacturer specification and have the same part number in accordance with the Certificate Holder's design.</p> <p><i>Sources:</i> 121.135(b)(16); 91 App..GSection 1(c)(1)</p> <p>2. Check at the air carrier specified location that the procedures were followed to maintain requirements for RVSM aircraft in accordance with the Certificate Holder's design.</p> <p><i>Sources:</i> 121.135(b)(1); 91 App..GSection 3(b)(1)</p> <p>3. Check at the air carrier specified location that periodic inspections were performed in accordance with the Certificate Holder's design.</p> <p><i>Sources:</i> 121.135(b)(16); 91 App..GSection 3(b)(1)(i)</p> <p>4. Check at the air carrier specified location that inspection procedures were followed in accordance with the Certificate Holder's design.</p> <p><i>Sources:</i> 121.135(b)(16); 91 App..GSection 3(b)(1)(i)</p> <p>5. Check at the air carrier specified location that the RVSM quality assurance program ensured continuing accuracy and reliability of test equipment used for RVSM aircraft in accordance with the Certificate Holder's design.</p> <p><i>Sources:</i> 121.135(b)(16); 91 App..GSection 3(b)(1)(ii)</p> <p>6. Check at the air carrier specified location that the Certificate Holder has complied with procedures for returning non-compliant aircraft to service in accordance with the Certificate Holder's design.</p> <p><i>Sources:</i> 121.135(b)(1); 91 App..GSection 3(b)(1)(iii)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.9.	<p>Did maintenance personnel follow the certificate holder's manual in notifying the crew when the aircraft has been restricted from RVSM operations?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

1.10.	<p>Did maintenance personnel follow the certificate holder's manual to ensure conformance to the RVSM maintenance standards?</p> <p><i>Related Performance JTIs:</i></p> <ol style="list-style-type: none"> <li>1. Check at the air carrier specified location that maintenance procedures were followed in accordance with the Certificate Holder's design. <i>Sources:</i> 121.135(b)(16); 91 App..GSection 3(b)(1)(i)</li> <li>2. Check at the air carrier specified location that inspection procedures were followed in accordance with the Certificate Holder's design. <i>Sources:</i> 121.135(b)(16); 91 App..GSection 3(b)(1)(i)</li> <li>3. Check at the air carrier specified location that the Certificate Holder has complied with procedures for returning non-compliant aircraft to service in accordance with the Certificate Holder's design. <i>Sources:</i> 121.135(b)(1); 91 App..GSection 3(b)(1)(iii)</li> </ol>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.11.	<p>Did maintenance personnel follow the certificate holder's manual in returning an aircraft to service after maintenance has been performed on an RVSM component/system to continue RVSM operations?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.12.	<p>Did maintenance personnel follow the certificate holder's manual in returning an aircraft to service after the aircraft was determined to be restricted from RVSM operations?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.	<p>Were the certificate holder's policies, procedures, instructions, and information for the RVSM Authorization process followed?</p> <p><i>Related Performance JTIs:</i></p> <ol style="list-style-type: none"> <li>1. Check at the air carrier specified location that aircraft operated within airspace designated as Reduced Vertical Separation Minimum (RVSM) airspace, complied with 91.706 in accordance with the Certificate Holder's design. <i>Sources:</i> 121.135(a)(1); 91.703(a)(4)</li> </ol>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.	<p>Were the RVSM Authorization process controls followed?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4.	<p>Did the records for the RVSM Authorization process comply with the instructions provided by the certificate holder?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.	<p>Were the process measurements for the RVSM Authorization process effective in identifying problems or potential problems and providing corrective action for them?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
6.	<p>Did personnel properly handle the associated interfaces by complying with other written policies, procedures, instructions, and information that are related to this element?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<b>EPI Section 1 - Performance Observables Drop-Down Menu</b>	
1.	Personnel.
2.	Tools and Equipment.
3.	Technical Data.
4.	Procedures, policies or instructions or information.
5.	Materials.
6.	Facilities.
7.	Controls.
8.	Process Measures.
9.	Interfaces.
10.	Desired Outcome.
11.	Other.

### EPI Section 2 - Management Responsibility & Authority Observables

**Objective:** The questions in this section address the responsibility and authority of the process. They are designed to assist the inspector in determining if there is a clearly identifiable, qualified, and knowledgeable person who is responsible for the process, is answerable for the quality of the process, and has the authority to establish and modify the process. (The person with the authority may or may not be the person with the responsibility.)

#### **Tasks**

	To meet this objective, the inspector must accomplish the following tasks:
	NOTE: If no personnel or major program changes (as defined by the principal inspector (PI)) affecting the responsibility or authority attributes for this element have occurred since the last SAI and/or EPI was accomplished, then do not perform tasks 3-6. Answer questions 1 and 2, below, and provide the name/title.
1.	Identify the person who has overall responsibility for the RVSM Authorization process.
2.	Identify the person who has overall authority for the RVSM Authorization process.
3.	Review the duties and responsibilities for the person(s) who manage the RVSM Authorization process.
4.	Review the appropriate organizational chart.
5.	Discuss the RVSM Authorization process with the management personnel identified in tasks 1 and 2.
6.	Evaluate the qualifications and work experience of the management personnel identified in tasks 1 and 2.

#### **Questions**

	To meet this objective, the inspector must answer the following questions:	
1.	Is there a clearly identified person who is responsible for the quality of the RVSM Authorization process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
2.	Is there a clearly identified person who has authority to establish and modify the certificate holder's policies, procedures, instructions, and information for the RVSM Authorization process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
3.	Does the responsible person know that he/she has responsibility for the RVSM Authorization process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
4.	Does the person with authority know that he/she has authority for the RVSM Authorization process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
5.	Does the person with responsibility for the RVSM Authorization process meet the qualification standards?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
6.	Does the person with authority to establish and modify the RVSM Authorization process meet the qualification standards?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change

7.	Does the person with responsibility understand the controls, process measurements, and interfaces associated with the RVSM Authorization process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
8.	Does the person with authority understand the controls, process measurements, and interfaces associated with the RVSM Authorization process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
9.	Does the responsible person know who has authority to establish and modify the RVSM Authorization process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
10.	Does the individual with authority know who has the responsibility for the RVSM Authorization process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change

<b>EPI Section 2 - Management Responsibility &amp; Authority Observables Drop-Down Menu</b>	
1.	Assignment of responsibility.
2.	Assignment of authority.
3.	Does not understand procedures, policies or instructions and information.
4.	Does not understand controls.
5.	Does not understand process measurements.
6.	Does not understand interfaces.
7.	Span of control.
8.	Position vacant.
9.	Other.