

Checklist RVSM approval

Operator ⁽¹⁾		
Aircraft type/variant		
Ref.		
Inspectors	(Name/signature) ⁽²⁾	Date
FOD Manager		
Flight Operations Inspector (FOI)		
Airworthiness Operations Inspector (AWI)		

⁽²⁾ By signing this checklist, I hereby confirm that, at the time of performing this activity, I did not have any conflict of interest to declare regarding the above-mentioned operator ⁽¹⁾.

No	Ref Non-compliance	Non-compliances

List of remarks	
Ref remarks	Remarks

Additional notes/comments:

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NA = Not Applicable; C = Compliant; NC = Not Compliant; R = Remark; N/R = Not Reviewed

Reference	Requirement	Specific requirements/expectations	Eval. operator	Eval. CA	Description
Application content					
AMC1 SPA.RVSM.105	Content of the RVSM application: - Airworthiness documents - Description of the aircraft equipment - Training programmes, operating practices and procedures - Manuals and check-lists - Past performance - MEL - Plan for participation in verification/monitoring programme - Continuing airworthiness programme/procedures	- Confirm receipt of the application form from the Operator. - Ensure that all applicable questions have been answered. - Check that the application contains all the required elements. - Check and verify OM D Training programme for flight crew - A training programme for the flight crew members involved in these operations has been established.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Aircraft eligibility					
SPA.RVSM.105(a)	Airworthiness approval	- Check that the aircraft hold an RVSM airworthiness approval (evidence of that via AFM or AFM supplement).		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
SPA.RVSM.110 AMC1 SPA.RVSM.110(a)	Aircraft equipment	- Check that the aircraft is equipped with: - o two independent altitude measurement systems; Additional criteria to be checked iaw. AMC1 SPA.RVSM.110(a) - o an altitude alerting system; - o an automatic altitude control system; - o a secondary surveillance radar (SSR) transponder with altitude reporting system that can be connected to the altitude measurement system in use for altitude control.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Operating procedures					
SPA.RVSM.105(d)(4) AMC2 SPA.RVSM.105	Flight planning / Pre-flight procedures	- Check that the flight planning procedures foresees the following items to be reviewed: - o airframe is approved for RVSM operations;		☐ N/A ☐ C	

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		- reported and forecast weather on the route of flight; - MEL items pertaining to height-keeping and alerting systems; and - airframe or operating restriction related to RVSM operations. - Check that the pre-flight procedures include: - The aircraft equipment condition review (MEL) - An external inspection of static sources and fuselage skin near static sources - Before T-O, altimeter to be set to QNH and cross-checked. (alternative procedure possible using QFE). - All equipment required for RVSM to be checked operative before take-off.		☐ NC ☐ R ☐ N/R	
SPA.RVSM.105(d)(5) AMC2 SPA.RVSM.105	Procedures prior to RVSM airspace entry	- Check that the procedure prior to RVSM airspace entry includes the check that the following equipment should be operating normally: - two primary altitude measurement systems. A cross-check between the primary altimeters should be made. A minimum of two will need to agree within ± 60 m (± 200 ft). Failure to meet this condition will require that the altimetry system be reported as defective and air traffic control (ATC) notified; - one automatic altitude-control system; - one altitude-alerting device; and (iv) operating transponder. - Check that the procedure requires the pilot to conduct a cross-check between the 2 altimetry systems. - Check that the procedure states that a new clearance is to be obtained if any of the required equipment fails.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
SPA.RVSM.105(d)(6) AMC2 SPA.RVSM.105	In-flight procedures	Check that the following practices are included in the FC procedures: - FC to comply with any operating restrictions - Sub-scale on all primary and std-by altimeters set to 1013.2 hPa when passing the transition altitude and rechecking the altimeter setting when reaching initial cleared FL. - Aircraft to be flown at cleared FL. ATC clearances to be fully understood and followed.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

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		- Undershoot or overshoot of more than 45 m (100 ft) to be avoided when changing FL. Automatic altitude-control system to be used. - Automatic altitude-control system to be operative and engaged during level cruise, except in case of need to re-trim the A/C or turbulence requiring disengagement. Adherence to cruise altitude to be done by ref to one of the 2 primary altimeters. - Altitude-alerting system to be checked operative. - Approx. every hour, cross-checks between primary altimeters to be made (max +/- 60 m (200 ft) discrepancy, ATC to be notified in case of exceedance. - Altimeter system used to control the aircraft to be selected for the input to the altitude reporting transponder. - When notified by ATC of a deviation from assigned altitude exceeding +/- 90 m (200 ft), FC to take action to return to cleared FL ASAP.			
SPA.RVSM.105(b) AMC2 SPA.RVSM.105	Contingency procedures/ reporting	- Check that the contingency procedures include the following: - Notification of ATC of any contingency affecting the ability to maintain the cleared FL: - Failure of the automatic altitude-control system - Loss of altimetry systems redundancy - Loss of engine thrust necessitating descent - Any other equipment affecting the ability to maintain cleared FL - ATC to be notified when encountering greater than moderate turbulence - If unable to notify ATC and obtain a clearance, regional contingency procedures should be followed.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
SPA.RVSM.105(d)(7) AMC2 SPA.RVSM.105	Post-flight procedures	- Check that post-flight procedure includes the following : - Tech log to be sufficiently detailed in case of malfunctions of height-keeping systems. - Information to be recorded: - Primary and std-by altimeters readings - Altitude selector setting - Subscale setting on an altimeter		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

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		- autopilot used to control the aircraft and any differences when an alternative autopilot system was selected; - differences in altimeter readings, if alternate static ports selected; - use of air data computer selector for fault diagnosis procedure; - the transponder selected to provide altitude information to ATC and any difference noted when an alternative transponder was selected.			
SPA.RVSM.105(d)(9) ICAO Doc 7030 ICAO Doc 444 (chap. 12)	Regional procedures/ phraseology	- Depending on the area of operations, check that the relevant RVSM regional procedures are described in the procedures. - Check that the ICAO Doc 4444 RVSM related phraseology is described in the procedures.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Occurrence reporting					
SPA.RVSM.115 Reg. 376/2014	Height keeping errors reporting	- Check that the operator has a procedure for reporting height-keeping errors equal or greater than: - o a total vertical error (TVE) of ± 90 m (± 300 ft); - o an altimetry system error (ASE) of ± 75 m (± 245 ft); and - o an assigned altitude deviation (AAD) of ± 90 m (± 300 ft). - Check that the procedure requires the reports to be sent to the CA within 72 hours. - Check that such reports shall include an initial analysis of causal factors and measures taken to prevent repeat occurrences.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Flight Crew composition/training					
SPA.RVSM.105(d)(2)	Flight crew composition	- Check that the operator has defined the minimum flight crew experience for RVSM operations and also the required flight crew composition.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

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SPA.RVSM.105(d)(2)	Flight crew training	- Check that an initial and a recurrent training programme have been defined. - Check that an RVSM training programme for flight crew has been defined containing at least the following: - o knowledge and understanding of standard ATC phraseology used in each area of operations; - o importance of crew members cross-checking to ensure that ATC clearances are promptly and correctly complied with; - o use and limitations in terms of accuracy of standby altimeters in contingencies; - o problems of visual perception of other aircraft at 300 m (1 000 ft) planned separation during darkness, when encountering local phenomena such as northern lights, for opposite and same direction traffic, and during turns; - o characteristics of aircraft altitude capture systems that may lead to overshoots; - o relationship between the aircraft's altimetry, automatic altitude control and transponder systems in normal and abnormal conditions; and - o any airframe operating restrictions, if required for the specific aircraft group, related to RVSM airworthiness approval.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
MEL					
SPA.RVSM.105(d)(1)	MEL	- Check that the MEL reflects the required operative equipment for RVSM operations.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
Continuing airworthiness					
AMC3 SPA.RVSM.105	Maintenance programme	- Check that the maintenance programme includes the instructions for continuing airworthiness issued by the TCH in relation to the RVSM operations certification in accordance with AMC1 ACNS.A.GEN.010.		☐ N/A ☐ C ☐ NC ☐ R	

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				☐ N/R	
AMC3 SPA.RVSM.105	Continuing airworthiness procedures	- Check that the continuing airworthiness procedures include a process to: ○ assess any modification or design change which in any way affects the RVSM approval; ○ evaluate any repairs that may affect the integrity of the continuing RVSM approval, e.g. those affecting the alignment of pitot/static probes, repairs to dents, or deformation around static plates; ○ ensure the proper maintenance of airframe geometry for proper surface contours and the mitigation of altimetry system error, surface measurements or skin waviness as specified in the instructions for continued airworthiness (ICA), to ensure adherence to RVSM tolerances. These checks should be performed following repairs or alterations having an effect on airframe surface and airflow.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
AMC3 SPA.RVSM.105	Continuing airworthiness and maintenance staff additional training	- Check that the operator has assessed the need to highlight for the initial and recurrent training of relevant personnel the following topics: ○ Aircraft geometric inspection techniques; ○ Test equipment calibration and use of that equipment; and ○ Any special instructions or procedures introduced for RVSM approval. ○ Test equipment (use of adequate test equipment iaw. TCH recommendations and accuracy/calibration requirements).		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	
SPA.RVSM.115(b)	Actions following height keeping errors identified.	- Check that the procedure foresees that the operator will take immediate action to rectify the conditions that caused the errors and provide follow-up reports if requested by the competent authority.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	

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Verification/monitoring programme					
SPA.RVSM.105(b) AMC1 SPA.RVSM.105	Plan for participation in the verification/monitoring programme.	- Check that the operator has established a plan for an acceptable verification/monitoring programme (e.g. HMU, GMU) It should include, as a minimum, a check on a sample of the operator's fleet by a regional monitoring agency (RMA)'s an independent height-monitoring system (e.g. EUROCONTROL) Check that it meets Eurocontrol minimum RVSM monitoring requirement based on aircraft types and the number of aircraft in the same category.		☐ N/A ☐ C ☐ NC ☐ R ☐ N/R	