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| **Operator** |  | **AOC No.:** |  |
| **Date:** |  | **Location:** |  |
| **Post Holder Training:** |  | **Telephone: No:** |  |
| **Email:** |  | **Fax:** |  |

**Note: Surveillance to be done with documents and records at main base of operator.**

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| **S/No** | | **Items** | **S** | **U/S** | **Comments** |
| **1.** | | **Operations Specifications** |  |  |  |
| **1.1** | | **RVSM** |  |  |  |
| **2.** | | **Operations Manual** |  |  |  |
| **2.1** | | **The following subjects must be covered:**  **Evidence of the certification status** of the affected aircraft has to be provided to CAA (AFM / Supplement) |  |  |  |
| **2.2** | | **Organization/Operator Responsibilities**  The operator has to ensure that all parts of the operations manual system are revised in a manner as to be compliant with the requirements relevant for RVSM operations. All airworthiness requirements must be fulfilled. |  |  |  |
| **2.3** | | **Standard Operating Procedures** (OM-B) |  |  |  |
| **2.4** | | **Training Programmes** (OM-D) must be defined and implemented in the OM-System. |  |  |  |
| **3.** | | **Regional specific operational procedures** and information must be implemented (OM-C). |  |  |  |
| **3.1** | | **Occurrence Reporting Procedures** have to be established and described accordingly (OM-A). |  |  |  |
| **3.2** | | **Is the Route Competence for RVSM Airspace declared?**  For flight crew members, the qualification “Route- Competence to operate in RVSM Airspace” must be declared in OM-A, |  |  |  |
| **3.3** | | **Does the operator consider operational influence related to RVSM operations during his flight preparation procedure?** |  |  |  |
| **3.4** | | * **Is a procedure established and appropriately described, indicating which equipment is required for the operation in RVSM airspace and which has to be checked to be operational before entering RVSM airspace?** |  |  |  |
| **3.5** | | The following subjects shall be described, as a minimum:   * **Flight Planning: For RVSM operations**, instructions must be provided to the flight crew to review and verify the aircraft technical status reflected in the Aircraft Technical Log (ATL), to verify the aeroplane dispatch status using the Minimum Equipment List (MEL) concerning RVSM operation and en-route weather forecast for the detection of areas with heavy turbulence on the intended route. |  |  |  |
| **S/No** | | **Items** | **S** | **U/S** | **Comments** | |
| **Contd. 3.4** | | * Aircraft External Inspection: It shall be stated that the external inspection procedure of the aeroplane shall focus on the fuselage skin condition in the surrounding of the static sources and the condition of the static sources itself. |  |  |  | |
| * Flight Deck Preparation: Instructions shall be provided for a comparison check between the indications of the two primary altimeters to be within a tolerance of 75 ft for RVSM operation |  |  |  | |
| * Equipment: It must be mentioned clearly that the following equipment must be checked to be operational prior to entering RVSM airspace: -   Two independent altitude measurement systems; and |  |  |  | |
| * One altitude alerting system; and |  |  |  | |
| * + One automatic altitude control system; and |  |  |  | |
| * + One secondary surveillance radar (SSR)transponder with altitude reporting system that can be connected to the altitude measurement system in use for altitude control. |  |  |  | |
| **3.5** | | **In-Flight Procedures**  Are the procedures applicable during RVSM operation described in detail?  Detailed provisions and procedures shall be made, covering the following, as a minimum: |  |  |  | |
|  | | 1. Notification that RVSM operation is limited in Altitude and also on Airspeed (Mach-Number). |  |  |  | |
|  | | 1. Altimeter setting procedures must be observed and respective crosschecks shall be performed in hourly intervals. |  |  |  | |
|  | | 1. Altitude comparison checks during level flight shall be stated to be within ± 200 ft. |  |  |  | |
|  | | 1. Procedures to monitor the aeroplane`s level-off manoeuvre and system capability at an assigned flight level while using the automatic altitude control system and the autopilot function. |  |  |  | |
|  | | 1. Monitoring procedures shall be described, ensuring that the altitude alerting system is operative. |  |  |  | |
|  | | 1. The limit for over or undershooting of 150 ft of an assigned flight level shall be stated. |  |  |  | |
|  | | 1. It must be stated that the altimeter system being used for altitude control shall be the source information for the altitude reporting transponder. |  |  |  | |
|  | 1. Applicable Standard ATC phraseology with regard to RVSM operation shall be implemented and the use of the respective wording shall be explained. | |  |  |  | |

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| **3.6** | Are the circumstances affecting the capability for RVSM operation of the aircraft concerned clearly mentioned? | |  |  |  |
|  | The list of circumstances that affect RVSM capability of an aeroplane shall contain at least the following:   1. Failure of all automatic altitude control systems**.** | |  |  |  |
|  | 1. Loss of redundancy of altimeter system. | |  |  |  |
|  | 1. Loss of engine thrust requiring to descend. | |  |  |  |
|  | 1. Any failure of equipment affecting the ability to maintain cleared flight level. | |  |  |  |
|  | 1. Heavy turbulence affecting the altitude keeping capability of the aircraft. | |  |  |  |
|  | Contingency procedures to be applied within RVSM airspace shall be described, containing at least the following:   * + Notification to the relevant Air Traffic Control Centre about the loss of RVSM capability by applying the respective phraseology. | |  |  |  |
|  | * Coordination of the action plan appropriate to the situation and airspace environment concerned. | |  |  |  |
| **3.7** | **Are the Post Flight Procedures adequately described with regard to RVSM operation?**  With respect to RVSM operations, the following shall be stated as a minimum:   * Any malfunction affecting the RVSM capability of the airplane shall be recorded in detail in the Aircraft Technical Logbook (ATL). | |  |  |  |
| **3.8** | **Altitude Deviations**  For altitude deviations during RVSM operations or height keeping errors, at least the following shall be stated and need to be reported: | |  |  |  |
|  | 1. A total vertical error (TVE) of ±300 ft.; and | |  |  |  |
|  | 1. An altimeter system error (ASE) of ±245 ft; and | |  |  |  |
|  | 1. An assigned altitude deviation (AAD) of ± 300 ft; and | |  |  |  |
|  | 1. During transition phase, overshooting or undershooting of a cleared flight level of more than 150 ft; and | |  |  |  |
|  | 1. The loss of RVSM capability; and | |  |  |  |
|  | 1. The application of any contingency procedure | |  |  |  |
|  | **Reporting Procedures**  The reporting procedure, that is applicable after any violation regarding RVSM operating rules, shall be described in detail, containing at least the following: | |  |  |  |
|  | 1. Who has to file the report (Commander); and | |  |  |  |
|  | 1. Who is receiving the report (Head of Flight Operations, Flight Safety Officer, etc.); and | |  |  |  |
| **S/No** | | **Items** | **S** | **U/S** | **Comments** |
|  | 1. that the report has to be filed within 72 hours after the occurrence, containing an initial analysis of causal factors and measurement taken to prevent the reoccurrence; and | |  |  |  |
| **3.9** | **Is the Operation Specification RVSM listed as a type of operation?** | |  |  |  |
|  | The following shall be stated, as a minimum:  The Operation Specification RVSM must be listed together with all other operations specifications applicable for the aeroplane (group) concerned. | |  |  |  |
|  | The speed limit for RVSM operations must be provided in the chapter limitations. Ideally, this shall be stipulated as a figure in KIAS or Mach, not as a reference only | |  |  |  |
| **3.10** | **Is the aircraft pre-flight procedure adopted for operational equipment required for RVSM operations?** | |  |  |  |
|  | **Pre-Flight Inspection**  The procedure shall be described, covering the following as a minimum: | |  |  |  |
|  | 1. The external inspection procedure shall contain all relevant equipment such as all static ports, especially the condition of the fuselage skin around the static-ports. | |  |  |  |
|  | 1. The cockpit preparation shall include a primary altimeter crosscheck to be within a tolerance of ±75 ft. | |  |  |  |
|  | 1. The equipment relevant for RVSM operations must be checked operational. | |  |  |  |
|  | 1. The Tech-Log-System shall be reviewed concerning the operational status and RVSM capability of the aeroplane | |  |  |  |
|  | **Altimeter Setting Procedures** | |  |  |  |
|  | **Altimeter Setting Procedures**  The different procedures shall be defined in detail, covering the following as a minimum: | |  |  |  |
|  | * The procedure for altimeter setting and checking shall be described in detail, covering all relevant aspects regarding crew coordination and crew communication (call-outs). | |  |  |  |
|  | * The procedure for the transition out of a climb or descent into a straight level flight shall be described, covering the relevant aspects in regard to the monitoring of correct operation of the altitude alerting system and the automatic altitude control system. | |  |  |  |
|  | * The procedure to perform primary altimeter crosschecks and respective recording. | |  |  |  |
|  | * The use of the autopilot system in relation to the respective altitude transmitting transponder. | |  |  |  |
| **3.11** | **Are contingency procedures established and described covering the case of any system malfunction affecting the RVSM capability?** | |  |  |  |

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| **S/No** | | **Items** | **S** | **U/S** | **Comments** |
|  | When the flight is exposed to any situation that implies a degradation of RVSM capability of the aeroplane, i.e. when encountering greater than moderate turbulence, the aeroplane type specific procedure to be applied by the flight crew shall be described, covering the following as a minimum:   1. the use of the automation system in general; and | |  |  |  |
|  | 1. the use of the altitude keeping system; and | |  |  |  |
|  | 1. the applicable flight modes of the automatic flight control system during flight level changes (climb or descend); and | |  |  |  |
|  | 1. the use of speed brakes and spoilers; and | |  |  |  |
|  | 1. the applicable mode for the use of the auto throttle system | |  |  |  |
| **3.12** | **Is the MEL amended in order to cover all system components that are relevant for the RVSM capability of the aeroplane?** | |  |  |  |
|  | The minimum equipment list shall be amended in order to comply with the requirement for RVSM operations in respect to system capability and redundancy | |  |  |  |
| **3.13** | **Operator Conversion Training Syllabus, Line Check and Proficiency Training and Checking**   1. **Is the RVSM training correctly integrated into both the conversion and recurrent training and the checking programme as well.** | |  |  |  |
| **3.14** | **Command Course**  **Is a sector included in the line flying under supervision module where RVSM operation can be applied within RVSM airspace?** | |  |  |  |
| **3.15** | **Is a RVSM training and checking module integrated within the OM-D?** | |  |  |  |
|  | Are the topics listed below implemented in the RVSM training and checking module? | |  |  |  |
|  | **RVSM training and checking module**  **Definition of Topic**  The RVSM training module must contain comprehensive instruction of basic knowledge and operational procedures in order to get familiar with all aspects of operations within RVSM airspace. | |  |  |  |
|  | **Standard of performance to be obtained**  The following standards of performance shall be defined as minimum requirement to be obtained after having completed the RVSM training module.   1. The trainee has obtained a thorough knowledge of the RVSM operational procedures and contingency procedures including standard ATC phraseology used in the relevant area of operations. | |  |  |  |
| **S/No** | | **Items** | **S** | **U/S** | **Comments** |
|  | 1. The trainee has an understanding of the Interaction between the aeroplane`s altimeter system, its automatic altitude control capability (with emphasis to the aeroplane altitude capture system) and the transponder system in normal and abnormal conditions; | |  |  |  |
|  | 1. The trainee understands visual perception of other aircrafts during darkness, when encountering local phenomena, for opposite and same direction traffic, and during turns; | |  |  |  |
|  | 1. The trainee has completed at least one sector during the line flying under supervision phase, where RVSM operation was applied. | |  |  |  |
| **Comments: -** | | | | | |

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| **Result: - Satisfactory** | **Unsatisfactory** |
| ***Note: Inspector must fill base inspection audit / Inspection Report - Form BASE INSP–004*** | |

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| **Flight Operations Inspector’s Name** | **Signature** | **Date:** |
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