

RA 1390 - Reduced Vertical Separation Minimum

Rationale

Growing demand to increase airspace capacity has resulted in the Reduced Vertical Separation Minimum (RVSM) Programme which has, in turn, introduced an additional 6 Flight Levels between FL 290 and FL 410 through the reduction of vertical separation between those Flight Levels from 2000 ft to 1000 ft. Without providing RVSM, airspace worldwide would become saturated with flights leading to increased Airprox Incidents and potential mid-air collisions. In order to fully exploit airspace worldwide there is a requirement to comply with the appropriate civil RVSM standards.

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1390(1) Aviation Duty Holders (ADHs) and Accountable Managers (Military Flying) (AM(MFs)) **shall** ensure that for RVSM operations, ►◄ Air Systems ►within their Area of Responsibility (AoR)◄ are ►◄ approved.

Acceptable Means of Compliance 1390(1)

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1. UK military registered Air Systems that ►◄ use the civil Air Traffic Service Structure as General Air Traffic (GAT) **should** comply with civil RVSM regulatory requirements of the nation who controls the airspace that the Air System is operating in.

RVSM Approval Process

2. Senior Responsible ►Owners◄ (SROs), Operating Duty Holders (ODHs) and AM(MF)s **should**:
 - a. Ensure that RVSM vertical navigation performance capability is compliant with the criteria ►specified by the International Civil Aviation Organization (ICAO)¹◄;
 - b. Include RVSM specifications and Systems (across all Defence Lines of Development (DLod)) in their Air System Safety Cases (ASSC)².
3. ODHs and AM(MF)s **should**:
 - a. Ensure Air Systems within their AoR achieve RVSM compliance through provision of appropriate orders, instructions and Minimum Equipment List (where used);
 - b. Ensure Aircrew are qualified and Competent both in the operation of RVSM equipment and relevant procedures needed for operation in RVSM airspace;
 - c. Assert compliance to the Defence Airspace and Air Traffic Management (DAATM) organization using ►Annex C to EUROCONTROL Guidelines◄ for the Certification ►and Operation◄ of State Aircraft in European RVSM Airspace³;
 - d. Ensure that Flight Plans are appropriately annotated for those Air Systems with a valid RVSM Approval.
4. The DAATM organization **should**:
 - a. Act as the point of contact with the European Regional Monitoring Agency (RMA) for RVSM matters regarding UK military registered Air Systems;
 - b. Provide updates regarding UK military RVSM Approvals, de-registrations,

¹ ►Refer to ICAO Part 91, Appendix G – Operations in Reduced Vertical Separation Minimum (RVSM) Airspace, Section 2.◄

² Refer to RA 1205 – Air System Safety Cases.

³ ►<https://www.eurocontrol.int/publication/eurocontrol-guidelines-certification-and-operation-state-aircraft-european-rvsm>.◄

**Acceptable
Means of
Compliance
1390(1)**

and withdrawals to the European RMA.

**Guidance
Material
1390(1)**

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5. RVSM creates requirements for Airworthiness Certification⁴ and Operational⁵ Approval to use RVSM Systems in RVSM designated airspace. This Regulation is designed to outline the route to RVSM Approval for UK military registered Air Systems. This Regulation does not aim to detail the RVSM Minimum Aircraft System Performance Specifications.
6. When the appropriate Release To Service (RTS) / Military Permit To Fly and ASSC² are in place, ODHs / AM(MF)s may assert compliance to DAATM. RTS clearance for RVSM operations does not constitute Operational Approval to conduct RVSM operations. Operational Approval can only be granted by the ODH.
7. When the relevant RVSM Approval process has been completed then the respective UK military registered Air System can be considered as having achieved RVSM Operational Approval⁶ in the civilian domain allowing them to operate in RVSM airspace worldwide.
8. The DAATM organization ▶◀ is the focal point regarding RVSM policy. The DAATM organization will also provide guidance on forthcoming changes to legislation to the Capability areas and MAA through the International Aviation Regulation and Compliance (IARC) Community of Interest.
9. Guidance on RVSM policy, Approval and processes may be found in the following documents:
 - a. ICAO 'Doc 9574 AN/934 Manual on Implementation of a 300 m (1000 ft) Vertical Separation Minimum Between FL 290 and FL 410 Inclusive'⁷;
 - b. EUROCONTROL ▶ Guidelines ◀ for the Certification and Operation of State Aircraft in European RVSM Airspace³;
 - c. UK Aeronautical Information Publication ▶ (AIP) – GEN 1.5 – Aircraft Instruments, Equipment and Flight Documents⁸. ◀
10. The European RMA is obliged to maintain a database of RVSM Approvals and will periodically compare samples of Flight Plan data where RVSM Approval has been stated with the database of Approvals.
11. UK military registered Air Systems without RVSM Approval may not operate as GAT within RVSM airspace with 1000 ft vertical separation. However, such Air Systems may file a Flight Plan to fly inside RVSM airspace with 2000 ft vertical separation with Exemption status; however, the routing offered may not be optimal.

⁴ Refer to RA 5810 – Military Type Certificate (MRP Part 21 Subpart B)); ▶◀ RA 1305 – Military Permit To Fly (In-Service), (Special Case Flying) and (Single Task); ▶◀ RA 5880 – Military Permit To Fly (Development) (MRP Part 21 Subpart P); and RA 1160 – The Defence Air Environment Operating Framework.

⁵ 'Operational' is used in the context of this RA because the term 'RVSM Operational Approval' is used specifically by ICAO and the Civil Aviation Authority (CAA).

⁶ Note: the term "RVSM-APPROVED" will be used to indicate that an Air System has been granted RVSM Approval.

⁷ ▶ [Manual on Implementation Vertical Separation \(Doc 9574\) | ICAO Store.](#)

⁸ [https://nats-uk.ead-it.com/cms-nats/opencms/en/Publications/AIP/.](https://nats-uk.ead-it.com/cms-nats/opencms/en/Publications/AIP/) ◀