



AP/ATM/6  
WP/16  
16/09/03

**International Civil Aviation Organization  
UNDP/ICAO Regional Project RLA/98/003  
Transition to the CNS/ATM Systems in the CAR and SAM Regions**

**Sixth Meeting/workshop of Air Traffic Management (ATM) Authorities and  
Planners for RVSM, RNAV routes and RNP implementation in the CAR and SAM Regions**

(San José, Costa Rica, 29 September-3 October 2003)

**Agenda Item 3      Review of the issues related with RVSM Implementation in the CAR/SAM  
Regions**

**a) ATC Operations Working Group (ATC/WG)**

**Communication Failure Procedures in RVSM Operations**

(Presented by the Rapporteur of RVSM/TF)

References
<ul style="list-style-type: none"><li>- Manual on the Implementation of a minimum vertical separation of 300 m (1 000 ft) between FL 290 y FL 410 inclusive, ICAO Doc. 9574</li><li>- ATC Guidance Material for RVSM Training in the CAR/SAM Regions Version 0.2</li><li>- EUR Regional Supplementary Procedures, ICAO Doc.7030</li><li>- Interim Guidance FAA -91</li><li>- Interim Guidance JAA TGL- 6</li></ul>



**1.            Background**

1.1            In draft version 0.2 of the ATC Guidance Material for RVSM Training in the CAR/SAM Regions, which is being presented to the meeting in working paper 11, in Chapter 7 “Communications Failure” it is proposed, based on European procedures, a procedure consisting in providing a minimum vertical separation of 600m (2000 feet) between an aircraft with communications failure and any other within the RVSM airspace.

**2.            Analysis**

2.1            In Chapter 5 “Procedures”, page 5-2, paragraph 5.1.1, item 4) of the Manual on the Implementation of a minimum vertical separation of 300 m (1 000 ft) between FL 290 y FL 410 inclusive, it

is established that: “*if unable to notify ATC and obtain an ATC clearance prior to deviating from the assigned CLL, the pilot should follow established contingency procedures as defined by the region of operation and obtain ATC clearance as soon as possible.*”

2.2 In respect of the above, communications failure between the pilot and the controller may be included in this possibility, but it should be recalled that within the contingency procedures referred to in the above-mentioned Manual, communications failure is not comprised.

2.3 Interim Guidance FAA-91 indicates in Appendix 4 in the Note to paragraph 4, that one of the evaluation criteria for the double equipment of automatic altitude control systems is, among others, the availability of direct communications between pilot and controller, highlighting in this way its critical importance within an RVSM airspace.

2.4 It could be stated, that most of the contingency procedures established for an RVSM scenario affecting the capacity to maintain CL, may need to coordinate an action plan between the pilot and the controller by direct communications, and the absence of an established special procedure in the event of a communications failure could lead the Region to establish extensive procedures attempting to cover the extensive range of possibilities for each contingency, which is not convenient nor practical from the human resources point of view.

2.5 The European region has established a procedure, shown in Doc. 7030, Regional Supplementary Procedures, which establishes that “*ATC shall provide a minimum vertical separation of 600 m (2 000 ft) between an aircraft experiencing a communications failure in flight and any other aircraft when both aircraft are operating within the EUR RVSM airspace.*”. Finally, it is desirable that in case any initiative is taken to support this procedure, this is not only shown in the ATC Guidance Material for RVSM Training in the CAR/SAM Regions, but also in the RVSM Concept of Operations (CONOPS) and in the Regional Supplementary Procedures (ICAO Doc 7030)

### 3. Conclusion

3.1 The meeting is invited to:

- a) Analyze in the ATC/WG the procedure being applied in the European region.
- b) Decide on the convenience to apply it in the CAR/SAM Regions for RVSM airspaces.
- c) If in agreement with this procedure, include the following text, or other considered more appropriate, in the CONOPS and in the Amendment to Doc. 7030.

PROPOSED TEXT: “*The ATC will arrange a minimum vertical separation of 600 m (2000 feet) between an aircraft with flight communications failure and any other aircraft, when both aircraft are operating within the RVSM CAR/SAM airspace, unless the horizontal separation is enough between the aircraft considered.*”

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