



AP/ATM/6  
WP/12  
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)**

**Phraseology related to RVSM Operations**

(Presented by the Secretariat)

**Summary**

This Working Paper presents the aeronautical phraseology related with RVSM operations approved during the second meeting of the RVSM Task Force of the GREPECAS ATM Committee and puts under the AP/ATM/6 meeting/workshop consideration its possible inclusion in the *Guidance Material on the Implementation of a 300 m (1 000 ft) vertical separation minimum (VSM) between FL 290 and FL 410 inclusive for application in the airspace of the Caribbean and South American Regions.*

**1. Introduction**

1.1 The aeronautical Phraseology related with RVSM operations used in other ICAO regions where RVSM is applied, was reviewed and its utilization was recommended in the CAR/SAM Regions during the Second Meeting of the RVSM Task Force (Sao Jose dos Campos, Sao Paulo, Brazil, 8 to 12 July 2002) by means of Decision 2/4.

**2. Analysis**

2.1 As you may know, the RVSM aeronautical phraseology is not yet included in the Air Navigation Services Procedures – Air Traffic Management (PANS ATM, Doc. 4444 ATM/501, 2001 edition).

2.1.1 According to the plans of ICAO Headquarters ATM section, it is expected that such phraseology be included in the PANS ATM at the end of 2004, reason for which, since that date, it will become the ICAO standardized phraseology in RVSM operations, which will be before RVSM implementation date in the CAR/SAM Regions.

2.1.2 Based on the above and considering that RVSM phraseology should be part of RVSM regional documentation, the Secretariat proposes that while its inclusion in the PANS ATM is processed, such phraseology be included in the *Guidance Material on the Implementation of a 300 m (1 000 ft) vertical separation minimum (VSM) between FL 290 and FL 410 inclusive for application in the airspace of the Caribbean and South American Regions.*

### 3. **Suggested Action**

2.1 That the Meeting take note of the information provided in this Working Paper and, if relevant, approve the following conclusion:

#### **Conclusion AP/ATM6/XXX Inclusion of RVSM Phraseology in the RVSM Regional documentation**

That, ICAO Secretariat take the pertinent actions to include the Aeronautical Phraseology for RVSM operations, presented in **Appendix XX** to this part of the Report, as Appendix G to the *Guidance Material on the Implementation of a 300 m (1 000 ft) vertical separation minimum (VSM) between FL 290 and FL 410 inclusive for application in the airspace of the Caribbean and South American Regions.*

**Phraseology Related to RVSM Operations**

**Controller-pilot phraseology:**

<b>Message</b>	<b>Phraseology</b>
For a controller to ascertain the RVSM approval status of an aircraft:	(call sign) <b>CONFIRM RVSM APPROVED</b>
For a pilot to report non-RVSM approval status:  i. on the initial call on any frequency within the RVSM airspace (controllers shall provide a readback with this same phrase), and  ii. in all requests for flight level changes pertaining to flight levels within the RVSM airspace; and  iii. in all read-backs to flight level clearances pertaining to flight levels within the RVSM airspace.  Additionally, except for State aircraft, pilots shall include this phrase to read back flight level clearances involving the vertical transit through FL 290 or FL 410.  <i>See examples that follow.</i>	<b>NEGATIVE RVSM*</b>
For a pilot to report RVSM approval status.	<b>AFFIRM RVSM*</b>
For a pilot of a non-RVSM approved State aircraft to report non-RVSM approval status, in response to the phrase (call sign) <b>CONFIRM RVSM APPROVED.</b>	<b>NEGATIVE RVSM STATE AIRCRAFT*</b>
Denial of clearance into the RVSM airspace:	(call sign) <b>UNABLE CLEARANCE INTO RVSM AIRSPACE, MAINTAIN [or DESCEND TO, or CLIMB TO] FLIGHT LEVEL (number)</b>
For a pilot to report when severe turbulence affects the aircraft's capability to maintain the height-keeping requirements for RVSM.	<b>UNABLE RVSM DUE TURBULENCE*</b>
For a pilot to report that the aircraft's equipment has degraded below the MASPS required for flight within the RVSM airspace.  <i>(This phrase is to be used to convey both the initial indication of the non-MASPS compliance, and henceforth, on initial contact on all frequencies within the lateral limits of the RVSM airspace until such time as the problem ceases to exist, or the aircraft has exited the RVSM airspace.)</i>	<b>UNABLE RVSM DUE EQUIPMENT*</b>

Message	Phraseology
For a pilot to report the ability to resume operations within the RVSM airspace after an equipment or weather-related contingency.	<b>READY TO RESUME RVSM*</b>
For a controller to confirm that an aircraft has regained its RVSM approval status, or to confirm that the pilot is ready to resume RVSM operations.	<b>REPORT ABLE TO RESUME RVSM</b>

Example 1: A non-RVSM approved State aircraft, maintaining FL 260, subsequently requests a climb to FL 320.

Pilot: (call sign) REQUEST FL 320, NEGATIVE RVSM  
 Controller: (call sign) CLIMB TO FL 320  
 Pilot: (call sign) CLIMB TO FL 320, NEGATIVE RVSM

Example 2: A non-RVSM approved State aircraft, maintaining FL 260, subsequently requests a climb to FL 430.

Pilot: (call sign) REQUEST FL 430, NEGATIVE RVSM  
 Controller: (call sign) CLIMB TO FL 430  
 Pilot: (call sign) CLIMB TO FL 430, NEGATIVE RVSM

Example 3: A non-RVSM approved State aircraft, maintaining FL 360, subsequently requests a climb to FL 380.

Pilot: (call sign) REQUEST FL 380, NEGATIVE RVSM  
 Controller: (call sign) CLIMB TO FL 380  
 Pilot: (call sign) CLIMB TO FL 380, NEGATIVE RVSM

Example 4: A non-RVSM approved civil aircraft maintaining FL 280, subsequently requests a climb to FL 320.

Pilot: (call sign) REQUEST FL 320, NEGATIVE RVSM  
 Controller: (call sign) UNABLE CLEARANCE INTO RVSM AIRSPACE  
 MAINTAIN FL 280

**Coordination between ATS units:**

Para	Message	Phraseology
1	To verbally supplement an automated estimate message exchange, which does not automatically transfer Item 18 flight plan information.	<b><u>NEGATIVE RVSM</u></b> or <b><u>NEGATIVE RVSM STATE AIRCRAFT</u></b> [as applicable]
2	To verbally supplement estimate messages of non-RVSM approved aircraft.	<b><u>NEGATIVE RVSM</u></b> or <b><u>NEGATIVE RVSM STATE AIRCRAFT</u></b> [as applicable]
3	To communicate the cause of a contingency relating to an aircraft that is unable to conduct RVSM operations due to severe turbulence or other severe weather-related phenomenon [or equipment failure, as applicable].	<b><u>UNABLE RVSM DUE TURBULENCE</u></b> [or <b><u>EQUIPMENT</u></b> , as applicable]