

**18<sup>th</sup> MEETING OF THE  
INFORMAL SOUTH PACIFIC AIR TRAFFIC SERVICES COORDINATING GROUP  
(ISPACG/18)**

(Nadi, Fiji – 24-26 February 2004)

Agenda Item 3: Review relevant work conducted since the last meeting

**Action Item 17-8: RVSM Traffic Movement Sample**

**SPECIFICATION FOR A TRAFFIC MOVEMENT SAMPLE TO SUPPORT EXAMINATION OF  
THE STATUS OF OPERATORS AND AIRCRAFT USING PACIFIC AIRSPACE WHERE  
REDUCED VERTICAL SEPARATION MINIMUM (RVSM) IS APPLIED**

*Presented by Pacific Approvals Registry and Monitoring Organization (PARMO)*

**SUMMARY**

This working paper provides specifications for a 1 –30 April 2004 traffic movement sample to support the Pacific Approvals Registry and Monitoring Organization (PARMO) annual examination of the State reduced vertical separation minimum (RVSM) approval status of operators and aircraft using Pacific flight information regions (FIRs) where RVSM has been implemented. The paper notes that this request for a traffic sample is identical to that put before the Group at its Seventeenth Meeting in March 2003. The paper identifies the information required for a flight and provides a possible format for the data comprising the sample from an FIR. In addition, the paper notes that the results of the examination will be provided, insofar as possible, to the next meeting of the Air Traffic Services/Aeronautical Information Services/Search and Rescue Sub-Group of the Asia Pacific Air Navigation Planning and Implementation Regional Group.

**1.0 Background**

- 1.1 At its Ninth Meeting (reference 1), the Asia Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) considered work already underway within the Region to progress implementation of reduced vertical separation minimum (RVSM). After review, the APANPIRG established the ICAO RVSM Implementation Task Force (RVSM TF). As its first effort, the APANPIRG charged the RVSM TF with introducing RVSM into Pacific flight information regions (FIRs).
- 1.2 At its Second Meeting (reference 2), the RVSM TF agreed that the Pacific Approvals Registry and Monitoring Organization (PARMO), provided as a service by the FAA Technical Center, would serve as the regional monitoring agency (RMA) called for in ICAO RVSM guidance material. This decision was affirmed at the Tenth Meeting of the APANPIRG (reference 3).
- 1.3 On 24 February 2000, RVSM was implemented in the following Pacific FIRs: Anchorage, Auckland, Brisbane, Nadi, Naha, Oakland, Tahiti and Tokyo; and on 1 April 2000, in the Port Moresby FIR.

- 1.4 Among the duties and responsibilities of the PARMO (reference 4, Appendix L) is: “to provide the means for identifying non-RVSM approved operators using Pacific airspace where RVSM is applied; and notifying the appropriate State approval authority”.
- 1.5 In fulfilment of this responsibility, the PARMO conducted examinations in calendar years 2000, 2001, 2002 and 2003 of the approval status of operators and aircraft using Pacific RVSM airspace. The first was based on a June 2000 sample of traffic movements from all Pacific FIRs and the second on a 15 April through 14 May 2001 sample. The PARMO presented ISPACG/16 (reference 5) with a request to conduct a one-month sample of traffic in all South Pacific FIRs where RVSM is applied. The results of each examination served as the basis for communications with State authorities and subsequent improvements.
- 1.6 The motivation for the February 2002 request to the ISPACG was direction from the APANPIRG at its Twelfth Meeting (reference 6), where the meeting “noted the need of the PARMO to collect a 4-week sample of traffic movements in early calendar year 2002 from those Pacific FIRs where the RVSM is applied in order to perform another analysis.” (reference 6, paragraph 2.1.31). The results of the April 2002 sample were reported to the Thirteenth Meeting of the APANPIRG in reference 7. The APANPIRG noted the results of the examination of RVSM-approval compliance and urged States to cooperate with the APARMO in providing information necessary to assist State authorities.
- 1.7 The purpose of this working paper is to propose that a 1 –30 April 2004 sample of traffic movements be collected from Pacific FIRs where the RVSM is applied in order to support a PARMO examination of the State RVSM approval status of operators and aircraft.

## **2.0 Background**

- 2.1 The PARMO maintains a database of State RVSM approvals issued in connection with RVSM introduction into the Pacific Region. In addition, the PARMO regularly acquires the latest version of a similar database maintained by the North Atlantic (NAT) Central Monitoring Agency (CMA). The union of these two databases is termed the Unified PARMO Database of Approvals. Further, the PARMO regularly consults the database of State RVSM approvals maintained by EUROCONTROL in connection with Continental European RVSM, which was implemented on 24 January 2002.
- 2.2 Each State approval in the Unified PARMO Database of Approvals identifies an aircraft by operator, type and registration number. The PARMO calendar year 2000, 2001, 2002, and 2003 examinations of approval status consisted of comparing the operator, aircraft type and, where provided, registration number of each flight in each FIR traffic movement sample to the entries in the database. All flights which appeared not to have State RVSM approval were then checked further against the EUROCONTROL database. Those flights failing this matching were then analyzed in order to remove any possible coding errors in preparing the samples. This flights still appearing to lack State RVSM approval were then the object of subsequent correspondence between the APARMO and the relevant State authorities and operators.

## **3.0 Discussion**

- 3.1 This section of the working paper presents the proposed specification for the 2004 sample of traffic movements to be used by the PARMO in examining the State approval status of operators and aircraft using Pacific airspace where RVSM is applied. It will be seen that this sample is identical in content and format to that requested at ISPACG/17 in March 2003.

### 3.2 Sample Period

3.2.1 The traffic sample should cover all flights operating in Pacific airspace where RVSM is applied for the period 1 April through 30 April 2004. Each Pacific ATS provider is requested to send its traffic movement sample to the PARMO by e-mail not later than 21 May 2004. The e-mail address for the PARMO is [aparmo@faa.gov](mailto:aparmo@faa.gov).

### 3.3 Flight Level Band

3.3.1 The traffic sample should cover those flights operating between flight levels 290 and 410, inclusive.

### 3.4 Format

3.4.1 The traffic sample from an FIR should be provided as an Excel spreadsheet in order to facilitate comparisons with the Unified PARMO Database of Approvals and with the EUROCONTROL database of State RVSM approvals.

### 3.5 Information Required for Each Traffic Movement

3.5.1 Table 1 presents the NECESSARY and OPTIONAL information requested for each flight. The PARMO found that all ATS providers assembling the calendar year 2000 and 2001 traffic samples were able to provide the entries shown as NECESSARY in the table, while several were also able to provide those shown as OPTIONAL. The OPTIONAL entries will provide the PARMO with further identifying information for use in examining any flight which does not appear in an State RVSM approvals database, and will also allow the PARMO to provide updates to certain safety oversight quantities which need to be examined periodically. A spreadsheet providing a recommended format is available for download from the PARMO web page at <http://www.tc.faa.gov/acb300/parmo>.

3.5.2 It is important to note that it is the content – rather than the format of the information on the spreadsheet - that is important to the examination of the State approval status of operators and aircraft using Pacific airspace where RVSM is applied. Thus, if an ATS provider finds it more convenient to use a format different from that shown on the PARMO web page, the PARMO will still be able to use the FIR traffic movement sample.

Date (either month/day/year or day/month/year format)	NECESSARY
Aircraft call sign	NECESSARY
Aircraft Type	NECESSARY
Aircraft Registration Number	OPTIONAL
Does Item 10 of Flight Plan Indicate That the Operator and Aircraft are RVSM-Approved? (Does a “W” Appear in Item 10 of Flight Plan?)	OPTIONAL
Origin Aerodrome	NECESSARY
Destination Aerodrome	NECESSARY
Entry Fix into RVSM Airspace	NECESSARY
Time at Entry Fix	NECESSARY
Flight Level at Entry Fix	NECESSARY
Exit Fix from RVSM Airspace	NECESSARY
Time at Exit Fix	NECESSARY

Flight Level at Exit Fix	NECESSARY
First Fix Within RVSM Airspace OR First Airway Within RVSM Airspace	OPTIONAL
Time at First Fix	OPTIONAL
Flight Level at First Fix	OPTIONAL
Second Fix Within RVSM Airspace OR Second Airway Within RVSM Airspace	
Time at Second Fix	OPTIONAL
Flight Level at Second Fix	OPTIONAL
(Continue with as many Fix/Time/Flight-Level entries as are required to describe the flight's movement within RVSM airspace)	OPTIONAL

**Table 1. Information Required for a Flight in Traffic Sample**

#### **4.0 Recommendations**

4.1 The ISPACG is invited to:

- a. examine the contents of the working paper and offer comments. In particular, the ISPACG is invited to suggest any additions, deletions or modifications to the information requested in the traffic sample; and
- b. endorse the collection of the sample of traffic movements described in this paper.

4.2 Each Pacific ATS provider is requested to submit its traffic movement sample to the PARMO by e-mail not later than **21 May 2004**. The PARMO e-mail address is **aparmo@faa.gov**. A spreadsheet providing a recommended format is available for download from the PARMO web page at **<http://www.tc.faa.gov/acb300/parmo>**.

4.3 Each Pacific ATS provider is requested to submit its traffic movement sample to the PARMO by e-mail not later than **21 May 2004**. The PARMO e-mail address is **aparmo@faa.gov**. A spreadsheet providing a recommended format is available for download from the PARMO web page at **<http://www.tc.faa.gov/acb300/parmo>**.

#### **References**

1. Report of the Ninth Meeting of the Asia/Pacific Planning and Implementation Regional Group (APANPIRG/9), ICAO Asia and Pacific Office, Bangkok, August 1998.
2. Report of the Second Meeting of the ICAO Reduced Vertical Separation Minimum Implementation Task Force (RVSM/TF/2), Los Angeles, 8 – 12 February 1999.
3. Report of the Tenth Meeting of the Asia/Pacific Planning and Implementation Regional Group (APANPIRG/10), ICAO Asia and Pacific Office, Bangkok, August 1999.
4. Report of the Sixth Meeting of the ICAO Reduced Vertical Separation Minimum Implementation Task Force (RVSM/TF/6), Singapore, 10 – 14 April 2000.
5. Report of the Sixteenth Meeting of the Informal South Pacific Air Traffic Services Coordinating Group (ISPACG/16), Papeete, Tahiti, 13-15 February 2002.

6. Report of the Twelfth Meeting of the Asia/Pacific Planning and Implementation Regional Group (APANPIRG/12), ICAO Asia and Pacific Office, Bangkok, 20-24 August 2001.
7. “Assessment of Non-State-Approved Operators Using Pacific RVSM Airspace Based on an April 2002 Traffic Sample,” Thirteenth Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/13), Bangkok, Thailand, 9 – 13 September 2002.

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