



*International Civil Aviation Organization*

**The Third Meeting of the Regional Airspace Safety Monitoring Advisory Group  
(RASMAG/3)**

Bangkok, Thailand, 6 – 7 June 2005

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**Agenda Item 4: Review the airspace safety monitoring arrangements in the Asia/Pacific Region and the activities of regional airspace safety monitoring agencies**

**REVIEW OF THE CURRENT RVSM MONITORING SERVICE ARRANGEMENT  
FOR JAPAN/REPUBLIC OF KOREA IMPLEMENTATION**

(Presented by Japan)

**SUMMARY**

This information paper reviews the current RVSM monitoring service arrangement for Japan/Republic of Korea and seeks confirmation for post-implementation arrangement.

In addition, outlines of JCAB's Airspace Safety Monitoring Unit are provided for information.

**1. Current RVSM Monitoring Service Arrangement for Japan/Republic of Korea**

1.1 At the Special ATS Coordination Meeting on the RVSM Implementation in the Incheon, Naha and Tokyo FIRs (SCM/RVSM-Japan/Republic of Korea) held in Bangkok from 5 to 7 July 2004, the meeting reviewed the monitoring and safety assessment required as part of the RVSM implementation process, and noted that the monitoring functions of the airspace planned for RVSM implementation in the Japan and Republic of Korea FIRs were under the responsibility of the Pacific Approvals and Monitoring Organization (PARMO) operated by the FAA. (*refer to the Flight Information Regions and Responsible Regional Monitoring Agency contained in ICAO Draft RMA Handbook*) At that time, PARMO had not confirmed the level of support that they would be able to provide in view of domestic RVSM implementation in the United States. As an interim measure, in view of the urgency to progress the readiness and safety assessment for the Incheon FIR, the meeting requested the Monitoring Agency for the Asia Region (MAAR) operated by AEROTHAI, to undertake the assessment work involved. In this regard, MAAR kindly advised that they were willing to provide the necessary monitoring services. In addition, it was agreed that ICAO would coordinate with PARMO on the proposed arrangements and advise MAAR accordingly.

1.2 The Twenty-third meeting of the RVSM Task Force (RVSM/TF/23) held in Bangkok from 18 to 22 October 2004, confirmed that due to the commitments for the domestic RVSM implementation in the United States, PARMO would not be able to provide the support for the readiness and safety assessment works required for Japan/Republic of Korea RVSM implementation. Thus MAAR was requested to undertake this work for them, and agreed to provide necessary services for the pre-RVSM implementation in Incheon, Naha and Tokyo FIRs.

1.3 On 20 January 2005, Domestic RVSM was successfully implemented in the airspace of the lower 48 States of the United States, Alaska, Gulf of Mexico and Atlantic High Offshore airspace (including Houston and Miami Oceanic airspace) and the San Juan FIR. On the same date, Canada expanded RVSM into Canadian southern domestic airspace and Mexico implemented RVSM to harmonize RVSM operations in the North American region.

## **2. Functions and Activities of JCAB Airspace Safety Monitoring Unit**

2.1 Annex 11-*Air Traffic Services* requires States to implement systematic and appropriate ATS safety management programmes to ensure that safety is maintained in the provision of ATS within airspaces and at aerodromes. This required ATS safety management programme shall: identify actual and potential hazards and determine the need for remedial action; ensure that remedial action necessary to maintain an acceptable level of safety is implemented; and provide for continuous monitoring and regular assessment of the safety level achieved.

2.2 In order to comply with this Standard and in view of implementing RVSM in the domestic airspace, JCAB established the Airspace Safety Monitoring Unit in ATC Division of JCAB (JASMU) in April 2004 for the purpose of conducting safety assessment required for the domestic RVSM implementation, and monitoring airspace safety for post implementation. At this stage, the work of JASMU is limited to safety assessment relating to the domestic RVSM implementation, and does not include assessment for horizontal separation reduction and ATS datalink. JASMU has been closely working with the Electric Navigation Research Institute (ENRI) which is a government funded research center and has experts internationally recognized for their extensive knowledge and significant works in the field of collision risk, airspace safety and separation matters. The ENRI also provides assistance to JASMU in developing systems for RVSM safety assessment and supervises JASMU's activities. With continued support from the ENRI, JASMU will have a full capability to conduct safety assessment and monitoring for RVSM operations in the domestic airspace of Japan one year after the implementation.

2.3 However, JCAB is considering expanding JASMU's functions to include safety assessment and monitoring for both vertical and horizontal separation reduction as well as ATS datalink for international airspace, i.e. Pacific airspace within Tokyo and Naha FIRs, after obtaining experiences from the domestic RVSM implementation.

## **3. Discussion**

3.1 It is suggested that the current arrangement for RVSM monitoring service for Incheon, Naha and Tokyo FIRs being provided by MAAR be reviewed after the implementation in September in light of the successful implementation of DRVSM in the United States, and FAA and AEROTHAI be requested to confirm their intention in regard to provision of RVSM monitoring services for Japan/Republic of Korea by PARMO and MAAR respectively.

3.2 JASMU is expected to be fully capable for independent safety assessment and monitoring for RVSM operations in the Japanese domestic airspace one year after the RVSM implementation, and is willing to work with other RMAs to reduce their burden.

3.3 Furthermore, JASMU will expand its functions and responsibilities for other services, such as RNP and ATS datalink in the international airspace over the Pacific within Japanese FIR, and will become one of regionally recognized safety monitoring agencies in the Asia/Pacific region.

## **4. Actions by the Meeting**

4.1 The meeting is invited to

- a) review the current RVSM monitoring service arrangement for Japan/Republic of Korea;
- b) consider a future arrangement for safety assessment and monitoring for Japan/Republic of Korea; and
- c) note the activities and future plan of JCAB's Airspace Safety Monitoring Unit.

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