



AP/ATM/5
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International Civil Aviation Organization

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

**Fifth Meeting/workshop of Air Traffic Management (ATM) Authorities and
Planners for RVSM, RNAV routes and RNP implementation in the CAR and SAM Regions
(AP/ATM/5 RVSM-RNAV-RNP)**

(Panama, Panama, 18 to 20 June 2003)

**Agenda Item 4: Review of the matters related to RVSM Implementation in the
CAR/SAM Regions**

b) Safety and Airspace Monitoring Working Group (SAM/WG)

Mode C data collection

(Prepared by Brazil)

Summary

This working paper proposes a new set of data to be collected by the ATC unit in the process of aircraft approval and used in the safety assessment, related to the height keeping performance and lateral deviation.

1. Introduction

1.1 The implementation of RVSM, to be done in a safe way, must have a great portion of airspace users RVSM approved, so that the implementation do not increase the air traffic controllers workload.

1.2 In the aircraft approval process, one of the data that should be collected is the flight technical error (FTE).

1.3 Considering the difficulty to obtain this data, and the proximity of the values, it can be substituted by the assigned altitude deviation (AAD) that is the difference between the transponded Mode C altitude and the assigned altitude/flight level.

1.4 The purpose of this working paper is to request States to start the process of collecting Mode C data during the monitoring flights for RVSM approval using a specific form.

2. **Discussion**

2.1 The Mode C data collection could be accomplished by the contractor that will be doing the monitoring process if it has an equipment to automatically collect the Mode C data.

2.2 As the number of that kind of equipment is restricted there will be times where that Mode C information necessary for the RVSM approval will have to be collected by the ATC unit in which airspace the monitoring flight is happening.

2.3 Considering that the extraction of Mode C data sometimes is not an easy task to be done and that more information must be collected together with it to do all the calculations needed, it is proposed a form to be used by the ATC units when requested to collect Mode C data for the aircraft RVSM approval process. The form is shown in the annex to this paper and should be in EXCEL format.

3. **Conclusion and recommendation**

3.1 The group is invited to analyze the form in the annex to this paper and adopt it as a standard for the Mode C data collection when requested.

Annex A

CALL SIGN	TYPE OF ACFT	DEPARTURE AD	DESTINATION AD	MODE A

DATE/TIME	AWY	GEOGRAFIC COORD or NOTIF FIX	CFL	MODE C	COURSE	LATERAL DEVIATION (m)

RMK: The fields DATE/TIME, AWY, GEOGRAFIC COORDINATES, CFL, MODE C, COURSE and LATERAL DEVIATION must be repeated for each radar antenna rotation during the period of data collection that should not be less than 30 minutes of leveled flight.