



International Civil Aviation Organization
Eastern and Southern African Office

**Thirteenth Meeting of the Air Traffic Management/Aeronautical
 Information Management/Search and Rescue Sub-Group
 (ATM/AIM/SAR SG/13)
 (Nairobi, Kenya, 16 - 19 September 2013)**

Agenda Item 5: RVSM Operations and Monitoring

2012 RVSM APPROVALS SURVEY

(Presented by ARMA)

SUMMARY
<p>This working paper presents the statistics of the Global RVSM Approvals Survey conducted in Africa for period December 2012. ATM Coordination procedures are proposed for Non RVSM approved aircraft.</p> <p>Action by the meeting is at paragraph 3.</p>
REFERENCES
ATM/AIM/SAR SG Reports
This working paper is related to Strategic Objectives: A

1. INTRODUCTION

1.1 The ARMA completed the RVSM approval survey for December 2012 as per ICAO RMACG tasking. The results are presented to the meeting to support the efforts towards achieving full RVSM compliance by all operators.

1.2 The AFI contribution will be incorporated into the consolidated Global document for use by the Secretary of the ICAO RMACG.

1.3 Non RVSM approved aircraft, State or Civilian, present a safety risk when flight plans are incorrectly submitted resulting in flight within the RVSM stratum. State aircraft, with prior coordination, could be accommodated in RVSM airspace with 2000FT separation traffic permitting in AFI.

2. DISCUSSION

2.1 Below are four explanatory notes to clarify the process that provides the information in the Table 1:

2.1.1 The ARMA is unable to conduct a survey by flight plan due to the many FIRs being surveyed and the limited access to all FIR's flight plans.

2.1.2 The surveys are conducted by scrutinizing traffic flow data per FIR and establishing RVSM status per aircraft with reference to the AFI RVSM Approvals database and those of other regions. (This is possibly the most effective method producing a realistic result) In most cases flight plans are requested from ACC's to support the UCR.

2.1.3 Thirty (30) FIRs are monitored. However, only 22 FIRs were assessed. This is three (3) more FIRs than the 2011 assessment. The emphasis is placed on the fact that all FIRs must submit traffic data.

2.1.4 The result is considered to be a true reflection of the non RVSM approved aircraft as most aircraft pass through more than one FIR.

2.2 The following FIR/ACC's have been assessed by FIR/ACC name in Table 1 below:

Table 1

FIR/ACC	% Non RVSM	FIR/ACC	% Non RVSM
Abidjan	0.56% of 1610 Flights	Harare	0.03% of 3800 Flights
Algiers	0.16% of 6096 Flights	Johannesburg	0.07% of 14972 Flights
Antananarivo	0% of 1507 Flights	Khartoum	0% of 4128 Flights
Bamako	1.10% of 454 Flights	Libreville	0.64% of 1404 Flights
Beira	0.10% of 3031 Flights	Mauritius	0.54% of 1112 Flights
Cape Town	0.04% of 6987 Flights	Mogadishu	0.18% of 2851 Flights
Dakar	0.29% of 1039 Flights	Nairobi	0.07% of 9486 Flights
Douala	0% of 875 Flights	Niamey	0.08% of 3970 Flights
Gaborone	0.03% of 3054 Flights	Ouagadougou	0% of 1683 Flights
Roberts	0.44% of 1165 Flights	Seychelles	0.28% of 1426 Flights
Entebbe	0% of 1463 Flights	Windhoek	0.05% of 1974 Flights

2.3 A total of 73230 flights were assessed and 46 aircraft were found to be non RVSM approved which is a reduction from 104 aircraft in 2011 that were found to be non RVSM approved.

2.4 Four point seven three percent (4.73%) of aircraft in the AFI RVSM airspace operated without a State RVSM Approval for the month of December 2012 this covers both Regional and International Operators.

2.5 The ARMA has followed up on all the Non RVSM approved aircraft, via UCR, so as to ensure that the relevant CAA's are made aware and can commence with remedial actions and report back to TAG and ultimately ARMA.

2.6 The ARMA has processed similar queries from other RMA's that have encountered and recorded African registered aircraft operating in the non-compliant category so that they can receive the required attention. It should be recalled that all RMA's coordinate on a continuous basis.

2.7 In some instances ARMA has been made aware that ATM coordination might have contributed to the incursion into RVSM airspace. However it is not always possible for ATC to provide the alert to the receiving ACC. The following are examples:

- Non RVSM approved State aircraft correctly flight planned receiving 2000FT separation should be coordinated with this information so as to enhance safety if possible.
- Non RVSM approved aircraft correctly flight planned at FL280 or below requesting clearance into RVSM airspace shall not be cleared. Where possible, the receiving ACC should be informed that the same request might be received and should be denied due to the non RVSM approval status.

2.8 States/ACC's would be wise to immediately inform ARMA of any suspected aircraft operating in RVSM airspace without RVSM approval so that ARMA can investigate and substantiate the event before taking up with the State of registry for remedial action.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note and review the contents of this working paper;
- b) where possible support the ATM coordination between ACC's of Non RVSM approved State aircraft transferring with 2000FT separation;
- c) where possible support the ATM coordination between ACC's of Non RVSM approved aircraft trying to solicit a higher level after transfer; and

- d) urge States/ACC's to inform the ARMA of suspected Non RVSM approved flights for further action.

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