

INTERNATIONAL CIVIL AVIATION ORGANIZATION



SUMMARY ON AFI RVSM SEMINAR

(Nairobi, 28 November 2006)

Prepared by the ICAO ESAF OFFICE, NAIROBI

This Summary constitutes what the Seminar considered and decided on the next course of action on the Findings/Outcomes.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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APPENDICE

Appendix A: List of Participants

PART I - HISTORY OF THE SEMINAR**1. Introduction**

1.1 The RVSM Seminar was convened pursuant to AFI/7 RAN Meeting Recommendations 5/7, 5/17 and APIRG/13 Decision 13/58, by the International Civil Aviation Organization in Nairobi on 28 November 2006.

1.2 The Seminar was opened by Mr. Geoffrey Moshabesha, ICAO ESAF Regional Director. He welcomed the participants and appreciated the large turnout by different professionals in the aviation field confirming that African States are really willing to meet the implementation of RVSM in AFI within the reasonable time. He appreciated the presence of the Technical Officer, ATM from ICAO Headquarters, Mr. Drazen Gardilcic. He recalled that the main objective of the seminar was to bring more awareness to the key role players in the RVSM implementation in the region (ATS, air crews, airworthiness, and operations personnel, etc). He acknowledged the workload ahead of States in the implementation process of RVSM in their respective States and urged them to ensure that all the outstanding tasks not yet finalized by each of them are achieved in order to enable the Task Force to fix a realistic RVSM implementation date for the AFI Region. He wished the delegates a successful seminar and a pleasant stay in Nairobi.

2. Officers and Secretariat

2.1 Mr. Apolo KHARUGA, Regional Officer, Air Traffic Management/Secretary of APIRG RVSM Task Force, of the ICAO ESAF Office, acted as the Moderator of the Seminar. Mr Drazen Gardilcic, Technical Officer ATM, ICAO HQ, Montreal, Ibrahim Usman Auyo, Regional Officer/ATM, WACAF Office, Mr. BROU Konan, Regional Officer/ATM, ESAF Office and Mr. Kevin EWELS, Manager, AFI Regional Monitoring Agency (ARMA), Mr. Chagas Judimar, Ag. Assistant Director, IATA, Mr Patrick M. Kinuthia, CATCO Planning, KCAA, Mr Hennie Marais, Senior Manager ATM Planning, Research and Development ATNS, South Africa and Mr Martin Sacramento, ASECNA HQ, Dakar, facilitated and serviced the seminar.

3. Attendance

3.1 The seminar was attended by 74 (Seventy Four) participants from 22 (Twenty Two) States and 5 (Five) International Organizations namely ARMA, ASECNA, IATA, IFALPA and IFATCA. The list of participants is given at the **Appendix A** to this summary.

4. Working Language

4.1 The meeting was conducted in the English language only.

5. Programme

5.1 The following Programme was adopted by the Seminar:

Tuesday, 28 November 2006		
0830 - 0900	Registration	
0900 - 0915	Opening Ceremony	
0915 - 0930	INTRODUCTION TO RVSM <ul style="list-style-type: none"> • Background • Need for RVSM • APIRG Decision • AFI RVSM Task Force • AFI RVSM Strategy 	(RO/ATM) (DP/2)
0930 - 1000	RVSM IMPLEMENTATION PROGRAM <ul style="list-style-type: none"> • AFI RVSM Implementation Plan • AFI RVSM Program Office • RVSM Program Assumptions • RVSM Program Dependencies • RVSM Program Risk Assessment • AFI RVSM Airspace • RVSM Procedures • RVSM System Performance Monitoring • ATS Services • Air Crew and Aircraft 	(RO/ATM) (DP/3)
1000 - 1045	AIRCREW REQUIREMENTS <ul style="list-style-type: none"> • Global Requirements • RVSM MASPS • RVSM Approval requirement • JAA Guidance Material • Current RVSM Approved Aircraft • RVSM Performance Criteria • Aircraft Systems • RVSM Operating Limitation • System Certification • Airworthiness Approval • Airworthiness Maintenance 	AFI RVSM Regional Monitoring Agency (ARMA)

Tuesday, 28 November 2006		
	<ul style="list-style-type: none"> • RVSM Approval Application • Pre-Flight • Prior to RVSM Entry • Post Flight • Flight Crew Training • Regional Procedures • RVSM and ACAS • Wake Vortex Turbulence • ADR and Turbulence Reports 	
1045 – 1100	Coffee Break	
1100 - 1130	<p><u>INDUSTRY AVIONICS PRESENTATION</u></p> <p><u>AIR TRAFFIC MANAGEMENT</u></p> <p><u>Flight Rules and ATC Clearances</u></p> <ul style="list-style-type: none"> • Background • Flight Rules • ATC Clearances <p><u>Procedures for State Aircraft</u></p> <ul style="list-style-type: none"> • Definition • State Aircraft as General Aviation • State Aircraft as OAT • RVSM Approved State Aircraft <p><u>Vertical Separation Minima</u></p> <ul style="list-style-type: none"> • RVSM Approved Aircraft • RVSM and Non-RVSM Aircraft • Transition Airspace • Communication Failure <p><u>Flight Planning</u></p> <ul style="list-style-type: none"> • Item 10 • Item 8 • Repetitive Flight Plans • Item Q in RPL • Modification Message • Non-RVSM Status • Formation Flights • Item 15 • Non-RVSM Operations • Departure & Destination Aerodrome within Lateral Limits of RVSM Airspace • Entering and Transiting Lateral Limits of 	<p>(TBD)</p> <p>(RO/ATM)</p>

Tuesday, 28 November 2006		
	<p>RVSM Airspace</p> <p><u>Air Traffic Management</u></p> <ul style="list-style-type: none"> • ATC Clearances • ATC Procedures • ATC Phraseology • ATC Training • Inter-Centre Letters of Agreement • Inter-Centre Coordination 	
	<p><u>Air Traffic System Support</u></p> <ul style="list-style-type: none"> • ATC System Adaptation • Flight Data Processing Systems • Flight Progress Strips • Radar Display Systems • Online Data Interchange • Short and Medium Term Conflict Alert 	
1130 - 1200	<p><u>HEIGHT MONITORING</u></p> <ul style="list-style-type: none"> • ICAO Prerequisites • Monitoring RVSM Airspace • Monitoring Process Objectives • Required Measured Height Keeping Performance • Key Elements of Monitoring Process • Aircraft Height Keeping Accuracy • Height Monitoring Units • GPS Monitoring Units • User Involvement • Identification of Aircraft • Monitoring Decision • Safety Assessment Data • Regional Monitoring Agency • Responsibility of State Authorities 	AFI RVSM Regional Monitoring Agency (ARMA)

Tuesday, 28 November 2006		
1200-1230	Eritrea DP on RVSM	Eritrea (DP/4)
1230 - 1300	<p style="text-align: center;"><u>RVSM SAFETY ASSURANCE</u></p> <ul style="list-style-type: none"> • Overall Safety Requirements • RVSM Safety Management • Stakeholder Responsibilities • Development Phases of Overall RVSM Safety Case • ICAO RVSM Target Level of Safety (TLS) • ATM and Safety Objective • RVSM Safety Policy • RVSM Safety Objectives • RVSM Safety Policy Deliverables <ul style="list-style-type: none"> - RVSM Functional Hazard Report - Collision Risk Assessment Report - National Safety Plan • Switch-Over Planning CVSM to RVSM • Switch-Over Risk Analysis 	(ARMA)
1300 - 1400	Lunch Break	
1400 - 1445	<p style="text-align: center;">RVSM IMPLEMENTATION</p> <ul style="list-style-type: none"> • RVSM National Safety Plan and NSPVP • RVSM Strategy/Action Plan • ARMA & Safety Assessment • RVSM Survey and Questionnaire • ATS letters of Agreement/Procedure • Status of PISC (FHA, CRA, NSP), POSC • RVSM Switch-over Plan • Doc.7030 – Amendment • Review of TF/10 conclusions • Military Guidance for the introduction of RVSM in Africa. 	(RO/ATM)
1445 – 1500	Coffee Break	
1500 – 1630	Conclusions and Closing Remarks	

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6. Findings and Outcome

6.1 At the conclusion of the seminar, the participants expressed their satisfaction with the material covered during the seminar. Specifically, the participants found that the presentations related to the status of activities of the RVSM Task Force was useful in that it would provide them with practical material to advance RVSM implementation in their respective States.

6.2 The participants also found that the discussions during the seminar were helpful in that it exposed many of them to experiences in other States in their implementation efforts. The seminar found the presentation about pilot training requirements to be particularly useful in giving a perspective of the types of issues that needed to be resolved by each State.

6.3 From the presenting the RVSM Project management (PMT) Team's perspective, the feedback received from the participants in the form of questions and comments gave the Team an idea of the status of implementation and the problems that may need to be addressed in the future by the Project Management Team and the Task Force.

6.4 The most productive part of the seminar was the Panel question and answer period held at the end of the session. The time allotted to that segment seemed to be almost inadequate to cover all the questions raised by the participants. Should there be a future seminar, the Panel was in agreement that these Q&A periods would be allotted extra time.

6.5 Among the more important issues raised in the Panel discussions, were the following:

- Definition of "State" aircraft.
- Initial and refresher training for controllers and pilots on RVSM
- Airworthiness and operational approval process
- Transition airspace
- Implementation date and need for a realistic estimate
- Benefits to be derived from RVSM implementation
- National Programme Managers incorporate in the RVSM committee other agencies i.e Meteorology, military, operators OPS/Air experts etc. as appropriate
- Target Level of Safety (TLS) and its application in RVSM implementation
- Guidance material for military aviation in RVSM implementation
- Delegated airspace and the need for appropriate coordination between the Approach Control and the parent ACC.

6.6 The meeting subsequently discussed the need for a future seminar to be held just prior to RVSM implementation. In that regard, there were proposals that a seminar may be desirable to address the switchover plan, contingency issues and any other last minute problem that may arise. It was decided to send the recommendation to the Task Force for a final decision.

PART II REPORT ON THE RVSM SEMINAR

7. RVSM Seminar process

7.1 The main objective of the Seminar was to bring awareness to the personnel involved in the RVSM implementation and airspace matters. The target group for the seminar were:

ATM specialists,
RVSM NPM,
Airline Pilots/Operators,
OPS/AIR specialist, and
Military aviation personnel.

7.2 At the end of the Seminar participants were equipped with the required knowledge to complete the final process of implementation of the RVSM in their respective States. The States were issued with all documentation presented at the seminar as reference for easy facilitation of the implementation.

7.3 The presentations were conducted in accordance with the scheduled programmes by Experts at paragraph 2 above.

7.4 The process of implementation from Task Force, the ATS/SG and APIRG was explained.

Note: All the documents on the seminars were provided to the participants and can be downloaded from the ICAO website: .www. icao.int/regional offices/nairobi/RVSM programme

Conclusion

7.5 The seminar proved to be successful in providing the guidance that States require to complete the pending requirements to meeting the appropriate target to the RVSM implementation in the AFI Region. The States are requested to take the appropriate action to the open issues yet to be fulfilled.

The following is a list of ICAO RVSM Documents which can be downloaded at the ICAO website:www.icao.int/regional/offices/nairobi/RVSM/programme

RVSM DOCUMENTS

1.	Specimen ATC Operations Manual for Implementation of RVSM (April 2006).
2.	AFI ATS RVSM Training Guidance Material.
3.	ICAO Doc.7030 amendment on RVSM (3M Edition September 2006).
4.	Guidance material for Airworthiness and Operational Approval.
5.	Specimen AIC on RVSM (January 2006)".
6.	Specimen NOTAM on RVSM (April 2006).
7.	AFI RVSM Implementation Strategy/Action Plan (June 2006).
8.	AFI RVSM Safety Policy (April 2006).
9.	National Safety Plan Final Amended Version (April 2006).
10.	Sample letter of Agreement incorporating RVSM (April 2006).
11.	ARMA Deviation Forms 1, 2, 3 and 4.
12.	PISC Schedule for RVSM Pre-Implementation Safety Case.
13.	RVSM Implementation Readiness Assessment Survey Forms.
14.	RVSM Readiness Survey Data (August 2006).
15.	Functional Hazard Analysis Report (May 2006)
16.	AFI RVSM Switch-Over Plan (June 2006).
17.	Draft PISC Doc. 3M Edition (June 2006).
18.	JAA TGL6 (January 2006).

19.	JAA Administrative and Guidance Material.
20.	NSP Validation Detailed Criteria.
21.	RVSM NSPVP Comments (April 2006).
22.	RVSM Reporting Format.

RVSM SEMINAR (NAIROBI, 28 NOVEMBER 2006)

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