



## SECOND MEETING OF THE RVSM TASK FORCE

(Sao Jose Dos Campos, Brazil, 8 - 12 July 2002)

### Agenda Item 3: **Update the RVSM Implementation Plan and develop the Task List including target dates and responsibilities for each task.**

(Working Paper presented by the United States)

#### SUMMARY

This working paper offers to the Meeting a CAR/SAM RVSM Implementation Task List to be updated for use in the Regions.

## 1 Introduction

1.1 GREPECAS conclusion 10/11, Implementation of RVSM in the CAR/SAM Regions, directs the CAR/SAM States/Territories and COCESNA to implement RVSM within the Flight Information Regions under their jurisdiction. In order to meet this commitment, work must begin immediately to develop detailed implementation plans and ensure the major program elements are completed.

## 2 Discussion

2.1 The attached Implementation Task List has been utilized many times as RVSM has spread around the globe. The Task List identifies each of the required and recommended tasks involved in an RVSM work program. Each task is followed by a "Start" and "Finish" date and is assigned to an appropriate subgroup, State or organization for action.

2.2 The cost benefit analysis, safety assessment, aircraft and operator issues, pilot and ATC issues, coordination and system verifications are all addressed in the Task List. As each task is completed, the Region will be progressing toward the final decision to implement RVSM.

## 3 Action

3.1 The Meeting is invited to review and accept the Implementation Task List for use in the Caribbean and South American Regions.

3.2 If accepted, the Implementation Task List should be reviewed and updated at every Task Force meeting to ensure a safe, harmonized RVSM implementation occurs.

CAR/SAM RVSM Implementation Task List					
ID	Description	Start	Finish	Resource Names	
<b>1</b>	<b>Identify Operational Need</b>				
2	Agree operational concept for CAR/SAM traffic flow	11-Jul-02	23-Nov-02	ATC/WG, RVSM Task Force	
<b>3</b>	<b>Conduct Cost Benefits Analysis</b>	11-Jul-02	<b>-6 months</b>		
4	Conduct preliminary benefit cost analysis	11-Jul-02	31-Oct-02	SAM WG	
5	Finalize benefit cost analysis	11-Jul-02	-6 months	SAM WG	
<b>6</b>	<b>Safety Assessment</b>	11-Jul-02	<b>-30 days</b>		
7	Review available summary data (non-compliant aircraft, aberrant aircraft etc)	11-Jul-02	-30 days	SAM/WG, RVSM Task Force	
8	Examine history of height keeping errors related to ATC clearances and assess possible RVSM impact	11-Jul-02	-30 days	SAM/WG, RVSM Task Force	
9	Confirm RVSM risk model assumptions/parameters are consistent with airspace where RVSM is to be applied	11-Jul-02	-30 days	SAM/WG, RVSM Task Force	
10	Conduct simulations to predict occupancy after RVSM implementation	11-Jul-02	-30 days	SAM/WG, RVSM Task Force	
11	Collect weather and turbulence data for analysis - this should include Andean standing wave analysis	11-Jul-02	-30 days	SAM/WG, RVSM Task Force	
12	Report large height deviations to monitoring agency (including level assignment errors)	11-Jul-02	Ongoing	ATS Providers, Users	
<b>13</b>	<b>Feasibility Analysis</b>	11-Jul-02	<b>-30 days</b>		
14	Examine the operational factors and workload associated with implementation	11-Jul-02	-30 days	ATC/WG, RVSM Task Force	
<b>15</b>	<b>Determination of Requirements (airborne &amp; ground systems)</b>	11-Jul-02	<b>-1 year</b>		
16	Determine need for additional GMUs	11-Jul-02	-1 year	SAM/WG, RVSM Task Force	
17	States assess the impact of RVSM implementation on controller automation systems (e.g., equipment suffixes) and plan for upgrades/modifications	11-Jul-02	-1 year	States	
<b>18</b>	<b>Aircraft &amp; Operator Approval Requirements</b>	11-Jul-02	<b>TBD</b>		
19	Promulgate the operational approval process	11-Jul-02	Ongoing	OPS/AIR/WG, RVSM Task Force	
20	Notify States when significant changes occur to RVSM documentation	11-Jul-02	Ongoing	OPS/AIR/WG, RVSM Task Force	
<b>21</b>	<b>Perform Rulemaking (if required)</b>	11-Jul-02	<b>TBD</b>		
22	Recommend State airspace regulatory documentation	11-Jul-02	TBD	States	
<b>23</b>	<b>Perform Necessary Industry &amp; International Co-ordination</b>	11-Jul-02	<b>TBD</b>		
24	Establish target implementation date	11-Jul-02	08-Aug-02	RVSM Task Force	
25	Report to GREPECAS	11-Jul-02	Oct/Nov-03	RVSM Task Force Chair	
26	Process Doc 7030 amendment	11-Jul-02	TBD	ICAO Regional Office	
27	Publish advance AIC	11-Jul-02	-1 year	States	
28	Publish AIP Supplement containing RVSM policy/procedures	11-Jul-02	-6 months	States	
29	Review inter-facility coordination procedures	11-Jul-02	-30 days	States	

CAR/SAM RVSM Implementation Task List					
ID	Description	Start	Finish	Resource Names	
30	Finalize changes to Letters of Agreement	11-Jul-02	-30 days	States	
<b>31</b>	<b>Approval of Aircraft &amp; Operators</b>	11-Jul-02	<b>-60 days</b>		
32	Establish approved operations readiness targets	11-Jul-02	-6 months	IATA, ATC/WG, RVSM Task Force	
33	Assess readiness	11-Jul-02	-60 days	IATA, OPS/AIR/WG	
<b>34</b>	<b>Develop Pilot &amp; ATC Procedures</b>	11-Jul-02	<b>TBD</b>		
35	Review application of tactical offset procedure to mitigate the effects of wake turbulence and TCAS alerts	11-Jul-02	TBD	ATC/WG, OPS/AIR/WG, RVSM Task Force	
36	Process Doc 7030 amendment to weather and contingency procedures	11-Jul-02	30-Jun-03	ICAO Regional Office	
37	Publish appropriate ATC policy & procedures on RVSM website	11-Jul-02	Ongoing	RVSM Task Force	
38	Identify transition areas and procedures	11-Jul-02	TBD	States, ATC/WG	
39	Conduct simulations	11-Jul-02	TBD	States, ATC/WG	
40	Report on simulation activity	11-Jul-02	TBD	ATC/WG, RVSM Task Force	
41	Continue to recommend that RVSM operators adopt TCAS V.7	11-Jul-02	01-Jan-04	OPS/AIR/WG, RVSM Task Force	
42	Develop procedures for handling non-compliant aircraft (inc ferry & mntce) in ATS documentation	11-Jul-02	30-Jun-03	OPS/AIR/WG, ATC/WG, RVSM Task Force	
43	Develop mutually acceptable ATC procedures for non-approved State acft to transit RVSM airspace	11-Jul-02	30-Jun-03	ATC/WG, RVSM Task Force	
44	Consider procedures for suspension of RVSM, including mountain wave effects	11-Jul-02	30-Jun-03	ATC/WG, RVSM Task Force	
45	Liaise with State defense authorities regarding "due regard" military operations	11-Jul-02	30-Jun-03	States	
<b>46</b>	<b>Pilot &amp; ATC Training</b>	11-Jul-02	<b>TBD</b>		
47	Provide ATC training documentation to States based on past experience	11-Jul-02	Ongoing	ICAO, RVSM Task Force Chairperson	
48	Conduct local RVSM training for air traffic controllers	11-Jul-02	TBD	States, ATC/WG	
<b>49</b>	<b>Perform System Verification</b>	11-Jul-02	<b>TBD</b>		
50	Height keeping performance monitoring needed to undertake initial safety analysis	11-Jul-02	TBD	Monitoring Agency and SAM/WG, RVSM Task Force	
51	Provide representative traffic movement data to monitoring agency	11-Jul-02	30-Apr-03	States	
52	Undertake initial safety analysis	11-Jul-02	TBD	SAM/WG, RVSM Task Force	
53	Prepare/maintain regional status report detailing RVSM implementation plans	11-Jul-02	Ongoing	RVSM Task Force	
<b>54</b>	<b>Final Implementation Decision</b>	11-Jul-02	<b>TBD</b>	<b>RVSM Task Force</b>	
55	Review aircraft altitude-keeping performance and operational errors	11-Jul-02	TBD	SAM/WG, OPS/AIR/WG	
56	ATS State documentation complete	11-Jul-02	-60 days	States	
57	Publish Trigger NOTAM	20-Nov-03	-7 days	States	
58	Complete readiness assessment		-30 days	Monitoring Agency	

CAR/SAM RVSM Implementation Task List					
ID	Description	Start	Finish	Resource Names	
59	Complete safety analysis		-30 days	RVSM Task Force	
<b>60</b>	<b>Declare Initial Operational Capability</b>		<b>TBD</b>	<b>Monitoring Agency and SAM/WG, RVSM Task Force</b>	
<b>61</b>	<b>Monitor System Performance</b>		<b>+1 year</b>		
62	Perform Follow-On Monitoring		Ongoing	OPS/AIR/WG, SAM/WG	
<b>63</b>	<b>Declare Full Operational Capability</b>			<b>RVSM Task Force</b>	
65	Seminar/1	05-Aug-02	07-Aug-02	RVSM Task Force	
64	Task Force/3	08-Aug-02	09-Aug-02	RVSM Task Force	
66	Task Force/4	TBD	TBD	RVSM Task Force	
67	Seminar/2	TBD	TBD	RVSM Task Force	
68	Task Force/5	TBD	TBD	RVSM Task Force	
69	Task Force/6	TBD	TBD	RVSM Task Force	
70	Task Force/7	TBD	TBD	RVSM Task Force	
71	Task Force - 90 day Follow Up	TBD	TBD	RVSM Task Force	
72	Task Force - 1 year Follow Up	TBD	TBD	RVSM Task Force	