

Appendix L

TERMS OF REFERENCE OF THE RVSM TASK FORCE

1. Terms of Reference

- a) To develop a strategic, benefits-driven implementation plan (based on cost benefit studies), in concert with airspace users, for RVSM operations within airspace of the CAR/SAM Regions, ensuring intra and inter regional harmonization;
- b) To implement RVSM in the CAR/SAM Regions in accordance with the operational concept developed by the States/Organizations in the RVSM TF;
- c) To consider amendments to RVSM guidance material that may be proposed by States and International Organizations;

2. Work Programme

Is shown in Appendix E to this part of the Report

3. Composition of the Task Force

Brazil, Colombia, France, Haiti, Paraguay, Panama, Peru, Trinidad and Tobago, United States, Uruguay (Roberto Arca*), Venezuela, ARINC, COCESNA, IATA, IFATCA, IFALPA and SITA

- Rapporteur

Terms of Reference of the ATC Operations Work Group (ATC/WG)

The ATC/WG is responsible for addressing all matters relating to air traffic services within the RVSM and transition airspace, to include the following:

- a) To develop a CAR/SAM RVSM Operational Concept;
- b) To identify exclusionary RVSM airspace;
- c) To identify RVSM transition airspace
- d) To develop the procedures for all facets of RVSM operations, including:
 - RVSM operations within and between exclusionary and transition airspace;
 - RVSM operations between FIRs and ATC service providers;
 - Weather deviation procedures;
 - Turbulence mitigation procedures;
 - Necessary contingency procedures;
 - Procedures for discontinuing the use of RVSM for temporary periods;
 - Procedures for the accommodation of non-approved civil aircraft, including emergency and humanitarian flights and ferry and maintenance, if appropriate;
 - Procedures for the accommodation of non-approved State aircraft;
 - Procedures for providing RVSM status information to controllers at the operational position, including any necessary changes to existing Flight Data Processing (FDP) systems.
- e) To consider controller workload issues and identify the need for simulations;
- f) To assist States and Organizations with airspace changes;
- g) To recommend and develop RVSM training material and methods for ATC staff;
- h) To provide to the States common aeronautical information publications and AIP supplements related to RVSM implementation;
- i) To develop necessary changes to regional documentation;
- j) To develop ATC procedures for switchover day and to determine if a cell should be created to assist States, Organizations and Operators during the switchover;
- k) To provide appropriate material to the RVSM web site administrator;
- l) To assist the SAM/WG with developing a mechanism for receiving, collating, and analyzing information concerning operational errors;
- m) To track the progress of the States in implementing ATC-related RVSM tasks, and to report this progress regularly to the RVSM Task Force;
- n) To accomplish other tasks as directed by the full RVSM Task Force.

**Terms of Reference of the Aircraft Operations and Airworthiness Work Group
(OPS/AIR/WG)**

The OPS/AIR/WG is responsible for addressing pilot operations, airworthiness, and aircraft approval issues, and:

- a) To harmonize policy on operations and airworthiness issues related to RVSM;
- b) To develop and harmonize guidance related to the implementation of RVSM and co-ordinate on issues which may arise in the application of the RVSM Minimum Aircraft System Performance Specifications (MASPS);
- c) To initiate necessary action to amend aeronautical charts to reflect navigational requirements related to RVSM;
- d) To develop policy for use of Airborne Collision Avoidance System (ACAS) as it relates to RVSM;
- e) To review monitoring data prior to implementation and after implementation;
- f) To track the progress of the States under the task lists and to report States' progress to RVSM TF;
- g) To provide material for the RVSM web site administrator;
- h) To accomplish other tasks as directed by the full RVSM Task Force

Terms of Reference of the Safety and airspace monitoring work group (SAM/WG)

The SAM/WG is responsible for mathematical and statistical analysis to assist with the maintenance and on going monitoring of safety through the assessment of collision risk for the CAR/SAM Regions RVSM and other tasks as agreed with RVSM Task force. The main tasks of the SAM/WG are:

- a) To develop a monitoring program to ensure that the quantity and quality of data are collected to allow an assessment of vertical collision risk;
- b) To review existing mathematical and statistical techniques to assure their appropriateness for the CAR/SAM regions;
- c) To ensure the transferability of aircraft data collected from other airspace regions;
- d) To support the assessment of the safety of RVSM prior to and during the Verification and Operational Trials by the production of collision risk assessments based on altitude deviation incidents and altitude monitoring data to determine whether the TLS is being met;
- e) To devise suitable methodologies for incorporating the effects of projected traffic increases and system changes on occupancy and collision risk in the future environment;
- f) To identify those elements which are critical in the assessment of collision risk and suggest areas where improvements might be effective in reducing risk;
- g) To establish a policy for investigating those errors that may jeopardize satisfaction of the Target Level of Safety (TLS);
- h) To estimate periodically the vertical occupancies (traffic densities, passing frequencies, etc.) to support ongoing monitoring of the target level of safety;
- i) To perform periodically other data collections (e.g. ASE stability) in order to ensure that the parameter values used in the mathematical collision risk models remain current;
- j) To track the progress of the States under the task lists and to report States' progress to RVSM TF;
- k) To accomplish other tasks as directed by the full RVSM Task Force;
- l) To provide material for the RVSM web site administrator.

OPS/AIR Work Programme/Programa de Trabajo OPS/AIR

#	OPS/AIR Task List/Lista de Tareas OPS/AIR	Responsible/ Responsable	Complete by/Comple- tar en
1	Investigate translation of sections of FAA 91-RVSM/TGL-6 into Spanish. Prioritize translation of Chapter 10, 11 and Appendices 4 and 5 from 91-RVSM. Coordinate with SAM ICAO Office./Estudiar la traducción al español de secciones del documento FAA 91 – RVSM/TGL-6. Priorizar la traducción de los Capítulos 10, 11 y los Apéndices 4 y 5 del 91-RVSM. Coordinar con la Oficina SAM de la OACI.	OPS/AIR	Completed/ Finalizada
2	OPS/AIR and ATS Group chairmen update and distribute Example AIP for review at next meeting.(See TF 3 WP 7, Appendix B). Add RVSM Phraseology to AIP./Los presidentes de los Grupos OPS/AIR y ATS actualizan y distribuyen el ejemplo de AIP para que sea revisado en la próxima reunión (Ver TF 3 NE 7, Apéndice B). Agregar la fraseología RVSM al AIP (Tarea #32/set 04).	OPS/AIR	Marzo 04
3	Establish format of CAR/SAM RVSM Documentation page. FAA distribute updated format for RVSM Documentation page for review./Establecer el formato para la página de Documentación del RVSM CAR/SAM. La FAA distribuirá para revisión el formato actualizado de la Página de documentación RVSM.	OPS/AIR	Completed/ Finalizada
4	Review and comment on CAR/SAM RVSM Guidance Material for Sept meeting/Revisión y comentario sobre el Material de Orientación RVSM CAR/SAM para la reunión de setiembre.	OPS/AIR	Completed/ Finalizada
5	Survey all operators to determine RVSM upgrade plans and determine which States need aircraft approval assistance. Coordinate with SAMWG/Encuesta a todos los operadores para determinar los planes de mejora del RVSM y determinar qué Estados necesitan asistencia para la aprobación de aeronaves. Coordinar con el Grupo de Trabajo SAM.	IATA	Mar 04
6	Remind operators that GREPECAS advocates compliance with ICAO Annex 6 provision for ACAS II equipage for designated aircraft by January 2003/Recordar a los operadores que GREPECAS requiere el cumplimiento del Anexo 6 de la OACI para el equipamiento ACAS II para aeronaves designadas en enero del 2003.	IATA ICAO/OACI	Completed/ Finalizada
7	Post updated documents on CAR/SAM RVSM Documentation page/Incluir documentos actualizados en la página de documentación del CAR/SAM RVSM.	OPS/AIR	Ongoing/En proceso
8	Develop Spanish and English languages versions of an approval process video/CD-ROM/Desarrollar las versiones en inglés y español del video/CD-ROM sobre proceso de aprobación.	OPS/AIR ICAO/OACI	Mar 04
9	Consider conducting an Aircraft/Operator Approval Workshop in conjunction with RVSM Seminar proposed for 1/2003 timeframe/Considerar la realización de un Taller sobre Aprobación de Aeronaves/Operadores, de manera conjunta con el Seminario RVSM propuesto para 1/2003.	OPS/AIR ICAO/OACI	Completed/ Finalizada

#	OPS/AIR Task List/Lista de Tareas OPS/AIR	Responsible/ Responsable	Complete by/Comple- tar en
9a	Coordinate visits to individual countries to review RVSM ATC and Operations/Airworthiness policy/procedures/Coordinar visitas a Estados particulares para revisar las políticas/procedimientos sobre RVSM ATC y Operaciones.	ICAO/OACI IATA, ATC OPS/AIR	Sep 04
10	Develop list of States with State registered civil aircraft and list of States with RVSM experience and approved fleet/Desarrollar una lista de Estados con aeronaves civiles registradas del Estado y una lista de Estados con experiencia RVSM y flota aprobada.	OPS/AIR	Completed/ Finalizada
12	Publish ACAS training material for CAR/SAM application based on FAA and European examples/Publicar material de entrenamiento ACAS para aplicación CAR/SAM basado en ejemplos de la FAA y europeos.	OPS/AIR	Jan/ene 04
13	Establish FIR's and ICAO Regions affected by CAR/SAM RVSM./Establecer las FIR's y Regiones de la OACI afectadas por el RVSM CAR/SAM.	ATC	Completed/ Finalizada
14	Coordinate with ATC group to develop Doc 7030. Consider CAR/SAM, Asia/Pacific and European Doc 7030 material./Coordinar con el grupo ATC para desarrollar el Doc 7030. Considerar el material sobre Doc 7030 de las Regiones CAR/SAM, Asia/Pacífico y Europea.	OPS/AIR	Jan/ene 04
15	Publish on Documentation page an example RVSM regulation based on an existing South American State regulation/Publicar en la página de documentación un ejemplo de regulación RVSM basado en una regulación existente de un Estado Sudamericano.	OPS/AIR	Mar 04
16	Coordinate with ICAO Lima (Roberto Cardoso) to obtain examples of Operations Specifications and Letters of Authorization. Need examples from CAR/SAM States./Coordinar con la OACI Lima (Roberto Cardoso) la obtención de ejemplos de especificaciones para las operaciones y cartas de autorización. Se necesita ejemplos de los Estados CAR/SAM.	FAA & OACI/ICAO	Oct 03
17	Determine status of RVSM in Pacific and Antarctica/South Pole areas/Determinar el estado del RVSM en las áreas Pacífico y Antártica/Polo Sur.	ATC OPS/AIR	Oct 03
18	In Example AIP, update draft contingency procedures. Consider oceanic and continental application. Review EUR, WATRS, South Atlantic and US procedures./En el ejemplo de AIP, actualizar el borrador de procedimientos de contingencia. Considerar aplicación oceánica y continental. Revisar los procedimientos EUR, WATRS, del Atlántico Sur y Estados Unidos.	OPS/AIR	Mar 04
18a	Review Strategic Lateral Offsets for application in CAR/SAM Regions./Revisar el desplazamiento lateral para aplicación en las Regiones CAR/SAM.	ATC OPS/AIR	Oct 03

#	OPS/AIR Task List/Lista de Tareas OPS/AIR	Responsible/Responsable	Complete by/Completar en
19	In Example AIP, review weather deviation procedures for application in continental and oceanic airspace./En el ejemplo de AIP, revisar los procedimientos de desviación meteorológica para aplicación en el espacio aéreo continental y oceánico.	OPS/AIR	Mar 04
20	Report on status of US DRVSM mountain wave procedures/Reportar el estado de procedimientos para ondas orográficas DRVSM de los Estados Unidos.	FAA	Mar 04
21	Request data about frequency of mountain wave activity from Argentina, Bolivia, Chile and Ecuador./Solicitar información sobre frecuencia de actividad de onda orográfica de Argentina, Bolivia, Chile y Ecuador.	ATC, OPS/AIR	Completed/ Finalizada
22	Update Aircraft/Operator Approval checklist for CAR/SAM application./Actualizar la lista de chequeo para aprobación de aeronaves/operador para aplicación CAR/SAM.	OPS/AIR	Oct 03
23	Review draft CAR/SAM Minimum Monitoring Requirements. Update aircraft placement in Category 3./Revisar el borrador de Requisitos mínimos de monitoreo CAR/SAM. Actualizar ubicación de aeronaves en Categoría 3.	SAM OPS/AIR	On going/ En proceso
25	Follow developments regarding pilot actions for ACAS/TCAS Resolution Advisories/Seguir el desarrollo de las acciones de pilotos para los Avisos de Resoluciones ACAS/TCAS.	OPS/AIR IATA IFALPA	Mar 04
26	FAA review material developed for WATRS RVSM implementation for application in CAR/SAM./La FAA revisa el material desarrollado para la implantación WATRS RVSM para aplicación en CAR/SAM.	FAA Sep	Completed/ Finalizada
27	Expand OPS/AIR coordination to include IFALPA, Airline management pilots and more operations specialists from CAR/SAM authorities./Ampliar la coordinación OPS/AIR incluyendo a IFALPA, pilotos en aerolíneas en cargos gerenciales y más especialistas en operaciones de las autoridades CAR/SAM.	OPS/AIR	Completed/ Finalizada
28	TF consider developing an ICAO State letter emphasizing State roles and responsibilities, use of TF documents and information, RVSM contacts and implementation plans./El GT considera que la OACI prepare una carta a los Estados, enfatizando los roles y responsabilidades de los Estados, el uso de documentos e información del GT, contactos y planes de implementación RVSM del GT.	Task Force/Grupo de Tarea	Oct 03

Former #11 completed by October 2003/Anterior #11 finalizada en octubre 2003.

Former #24 completed by June 2003/Anterior # 24 finalizada en junio 2003.