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**Sixth Meeting of the North American, Central American and Caribbean Directors of Civil Aviation  
(NACC/DCA/06)**

Nassau, Bahamas, 10-12 May 2016

**Agenda Item 3: Regional Groups**

**3.2 CAR/SAM Regional Planning and Implementation Group (GREPECAS)**

**CAR/SAM REGIONAL IMPLEMENTATION AND PLANNING GROUP (GREPECAS) RESULTS**

(Presented by the GREPECAS Vice-Chairperson)

<b>EXECUTIVE SUMMARY</b>	
This paper presents the relevant GREPECAS results in support of Air Navigation implementation, including its conclusions, reporting and monitoring activities in this implementation and the deployment of the electronic Air Navigation Plans.	
<b>Action:</b>	Included in Section 3.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li><li>• Environmental Protection</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• GREPECAS/17 Report, Cochabamba, Bolivia, 21 to 25 July 2014</li><li>• PPRC/3 Report, ICAO NACC Regional Office, Mexico City, Mexico, 21 to 23 July 2015</li></ul>

**1. Introduction**

1.1 The CAR/SAM Regional Planning and Implementation Group (GREPECAS) was established by the ICAO Council in 1990, as recommended by the Second CAR/SAM Regional Air Navigation Meeting - 1989. (Action by Council on Recommendation 14/6 of the CAR/SAM/2 RAN Meeting is set out in Supplement No. 1 to Doc 9543, CAR/SAM/2). The ICAO Council agreed, during its 183 Session, that all CAR/SAM States and respective Air Navigation Service Providers shall be members of GREPECAS.

1.2 The eighth meeting of the GREPECAS Administration Coordination Group (ACG/8) (Mexico City, Mexico, 26-27 January 2011) analysed the need to restructure GREPECAS and its contributory bodies in order to create a result-oriented organisation that is better aligned with current ICAO objectives, methodology, and budget restrictions, applying a project-based work methodology.

1.3 GREPECAS through Decision 16/45 - New GREPECAS Organisation, and Decision 16/47 - Transformation of the GREPECAS subgroups, approved the transformation of the GREPECAS AERMET, AGA/AOP, AIM and CNS/ATM Subgroups and their respective Task Forces into programmes and projects.

## **2. Discussions**

2.1 As part of its mandate, the following terms of reference are to be carried out by GREPECAS:

- a) continuous and coherent development of the CAR/SAM Air Navigation Plan and other relevant regional documentation in a manner that is harmonized with adjacent regions, consistent with ICAO SARPs and reflecting global requirements;
- b) facilitation of the implementation of air navigation systems and services as identified in the CAR/SAM Air Navigation Plan, giving due priority to air safety;
- c) identification and aiding in addressing specific deficiencies in the air navigation field; and
- d) coordination of safety issues with Regional Air Safety Groups (RASGs).

### ***Follow-up to valid GREPECAS Conclusions***

2.2 The GREPECAS/17 and the PPRC/3 Meeting Conclusions and Decisions are included in the **Appendix A** to this Paper. The actual implementation of these conclusions and the GREPECAS Programme and Projects activities are implemented mainly by the NAM/CAR Regional Air Navigation Working Group (ANI/WG) and its Task Forces and coordinated by the ICAO NACC Regional Office.

### ***Monitoring and reporting of Air Navigation Targets***

2.3 GREPECAS is the Regional body that collects all the progress achieved by the CAR and SAM Regions on Air Navigation matters, resulting from the monitoring conducted by the respective implementation groups like the different ANI/WG task forces as contained in the different Implementation Plans. To support the monitoring and tracking of the progress toward these targets and provide a visual reference for all States/ANSPs and relevant users, ICAO developed a prototype webpage under the ICAO NACC Regional Office website: <http://www.icao.int/NACC/Pages/Implementation-Targets.aspx>.

2.4 To date, the revised Air Navigation reporting Form (ANRF) has not been yet implemented and the reporting of the progress toward the Port of Spain targets has been made by the Regional Offices to GREPECAS in 2015 as shown in **Appendix B**. Even though the revised ANRF was proposed to the eANP CAR/SAM Volume III, due to the harmonization of this Volume by ICAO, the new Volume III will not be implemented until the end of 2016.

2.5 Following ICAO commitment to assist and take the necessary actions to support the States in the completion of the reporting forms to ensure the proper understanding and appropriate provision of information for monitoring the implementation. To this end, an ASBU implementation workshop is scheduled for August 2016. This workshop looks to solve the difficulty for Regions and States to correlate their plans with the ICAO ASBU planning framework, using the ASBU working document and the elements for each Module.

### ***eANP (Doc 8733) Development and Implementation***

2.6 Since 2015 and following the Twelfth Air Navigation Conference (AN-Conf/12) Recommendation 6/1 — *Regional performance framework – planning methodologies and tools* to align the ANSPs with the *Global Air Navigation Plan* (GANP) (Doc 9750), GREPECAS through the ICAO NACC and SAM Regional Offices is carrying out the development and implementation of the CAR/SAM electronic Air Navigation Plan (eANP) (Doc 8733).

2.7 CAR/SAM eANP Volume I has been approved by the President of the ICAO Council on 4 April 2016, and States were notified through ICAO State Letter Ref. NACC60296 dated 20 April 2016. Volume I is available at the ICAO NACC Regional Office website at: <http://www.icao.int/NACC/Pages/namcar-eANPV1.aspx>

2.8 The implementation of the Volume II and III is shown in **Appendix C** to this paper. The timely revision and completion of the eANP has been conducted successfully with the support of the designated State PoCs.

2.9 For the NAM Region, the ICAO NACC Regional Office jointly with Canada and United States, had conducted several teleconferences and informal meetings to develop the electronic NAM eANP. A draft Volume I is almost completed, Volumes II is still under development and a Provisional Volume III with a NAM ASBU handbook was been drafted.

**3. Suggested Actions**

3.1 The Meeting is invited to:

- a) take note of the GREPECAS conclusions and the follow-up being conducted by the ANI/WG;
- b) review the monitoring and reporting activities conducted by GREPECAS, taking note of the ASBU implementation workshop scheduled for August 2016;
- c) support the activities for the CAR/SAM and NAM eANP development and implementation; and
- d) agree any other action as deemed appropriate by the Meeting.

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**APPENDIX A**  
**GREPECAS/17 AND PPRC/3 CONCLUSIONS/DECISIONS**

Conclusions / Decisions	Title of Conclusion / Decision	Text of Conclusion/Decision
<b>GREPECAS Conclusion 17/1</b>	Regional and global air navigation reporting	That States: a) support the plan to produce an online Regional Performance Dashboard in March 2014 and the annual Global Air Navigation Report to be published in April 2014; b) provide the required information to the ICAO Regional Offices to demonstrate operational improvements by February 2014 and periodically thereafter; and c) establish, if not yet done so, a performance measurement strategy that comprises data compilation, processing, storage and reporting for the regional performance metrics identified for air navigation systems.
<b>GREPECAS Conclusion 17/2</b>	Follow-up on AN-Conf/12 recommendations by States and international organisations	That States and international organisations, on the basis of the analysis to Appendix A* to this part of the report, take follow-up action as appropriate on the applicable recommendations of AN-Conf/12. Appendix A to Agenda Item 2 of PPRC/2
<b>GREPECAS Decision 17/3</b>	Regional priorities and targets for air navigation	That GREPECAS: a) establish, as per Recommendations 6/1 and 6/12 of the Twelfth Air Navigation Conference (AN-Conf/12), regional priorities and targets for air navigation, consistent with the Global Air Navigation Plan (GANP) and Aviation System Block Upgrades (ASBU), by March 2014, if possible, and by May 2014 at the latest; and b) as per GREPECAS Decision 16/3, the regional priorities and targets for air navigation will be coordinated with RASG-PA to ensure consistency of action and avoid overlap.
<b>GREPECAS Decision 17/4</b>	Revised Terms of Reference and Work Programme of the Programmes and Projects Review Committee (PPRC)	That the proposed revised terms of reference and work programme of the PPRC shown in Appendix A to this part of the report are approved.
<b>GREPECAS Decision 17/5</b>	GREPECAS Annual Report	That GREPECAS submit an annual report to the ICAO Air Navigation Bureau (ANB) consisting of the GREPECAS meeting report in years when a GREPECAS meeting is held and a PPRC meeting report in other years, which includes a Table of Conclusions and Decisions in the format presented in Appendix B.

Conclusions / Decisions	Title of Conclusion / Decision	Text of Conclusion/Decision
<b>GREPECAS Conclusion 17/6</b>	Follow-Up On The Implementation of A38 Resolutions Regarding Air Navigation	That, pursuant to the resolutions of the 38th Assembly concerning air navigation matters, CAR/SAM States: a) proceed to amend their national air navigation plans, taking into account the GANP and the regional performance-based implementation plans, aligned with the ASBUs; b) provide the respective ICAO Regional Offices, no later than 15 September 2014, with the names and contact information (telephone, e-mail) of the focal points designated to coordinate with ICAO and the national bodies responsible for managing the radio frequency spectrum, with a view to supporting the ICAO position at the ITU WRC-15; c) use ICAO standardized phraseology in all situations for which it has been specified and make use of the ICAO Aviation English Language Test Service (AELT) to verify d) language proficiency testing instruments; e) publish any significant differences in their Aeronautical Information Publication (AIP) and use the Electronic Filing of Differences (EFOD) system to notify differences to ICAO; and f) note the criteria of the permanent declaration of Resolution A38-12 and take them into account in the planning, establishment, and operation of air navigation services.
<b>GREPECAS Conclusion 17/7</b>	Approval Of The Forms To Follow-Up On The Progress On Indicators And Targets For The CAR/SAM Regions	That for GREPECAS to collect, monitor, and report progress on operational improvement implementation in the CAR/SAM Regions based on the indicators and targets established in the Bogota and Port-of-Spain Declarations and subsequently submit it to the ICAO Air Navigation Commission: a) the form presented in Appendix A to this part of the report is approved; and b) the ICAO NACC and SAM Regional Offices will implement this form in order to report progress for inclusion in the regional performance dashboards.
<b>GREPECAS Conclusion 17/8</b>	Inclusion Of Regional Performance-Based Implementation Plans In The New Air Navigation Plan (eANP)	That, taking into account the individual regional performance-based implementation plans, the ICAO NACC and SAM Regional Offices include the corresponding sections of those plans in the new electronic CAR/SAM Air Navigation Plan (eANP), Volume III.
<b>GREPECAS Conclusion 17/9</b>	Activities For A Consolidated Interface Control Document (ICD) For AIDC Implementation In The CAR and SAM Regions	That, in order to ensure efficient and practical implementation of AIDC functionality at both intra- and inter-regional levels between the CAR and SAM Regions: a) ICAO, through the GREPECAS D Programme, shall assess the existing ICDs and coordinate the necessary activities for development of a consolidated Interface Control Document (ICD) for AIDC implementation in the CAR and SAM Regions; and b) D Programme Projects shall submit the results of coordination for a consolidated ICD for the CAR and SAM Regions at the GREPECAS PPRC/3 Meeting.
<b>GREPECAS Conclusion 17/10</b>	Manual-Guide On The Assessment Of Large Height Deviations (LHDs) With SMS Methodology For The Analysis And Assessment of LHD Reports	That the States of the CAR/SAM Regions use the Manual-Guide on the Assessment of Large Height Deviations (LHDs) with SMS methodology presented in Appendix B to this part of the report for the analysis of LHDs reports.

Conclusions / Decisions	Title of Conclusion / Decision	Text of Conclusion/Decision
<b>GREPECAS Conclusion 17/11</b>	Improvements In Met Activities	That CAR/SAM States, Territories and International Organisations: a) continue conducting periodic volcanic ash tests; b) urge the AIS areas to prepare and disseminate, in coordination with the MET areas, ASHTAM messages when conducting volcanic ash exercises; c) urge Civil Aviation Training Centres (CATCs) to implement training programmes for MET personnel in accordance with the principles emanating from the World Meteorological Organization (WMO), contained in Publication No.1083 – WMO (PIB-M); d) secure the funds required for lead auditors to visit other States of the Region to audit the MET/QMS implemented in the CAR/SAM Regions; and e) urge the Brasilia OPMET Databank to continue conducting OPMET exchange controls on a quarterly basis.
<b>GREPECAS Conclusion 17/12</b>	Revision Of The ICAO Uniform Methodology For The Identification, Assessment and Reporting of Air Navigation Deficiencies	That ICAO consider conducting a comprehensive revision of the uniform methodology for the identification, assessment and reporting of air navigation deficiencies, identifying opportunities for improving both the database as well as the process itself, in order to generate a more efficient and effective process, with greater participation of the users, and taking into account the existing limitations of the Secretariat for the identification of deficiencies through State missions.
<b>GREPECAS Decision 17/13</b>	Approval of Amendment of the GREPECAS Procedural Handbook	Version 1.2 of the Sixth Edition of the GREPECAS Procedural Handbook, as shown in Appendix to this part of the Report is approved.
<b>PPRC DRAFT CONCLUSION 3/1</b>	Follow-up on the PIRGS and RASGS Global Coordination Actions	That, with the purpose of complying with the implementation of the actions suggested in the Second PIRGS-RASGS Global Coordination Meeting, CAR/SAM Regions States/Territories and International Organizations and ICAO NACC and SAM Regional Offices implement the corresponding suggested actions and follow-up on the actions to be implemented by ICAO, according to the table presented in Appendix A to this part of the report.
<b>PPRC DRAFT DECISION 3/2</b>	New CAR/SAM Regions Electronic Air Navigation Plan (eANP) Volumes I, II and III	That, in order to expedite the preparation and approval of the new electronic Air Navigation Plan (eANP) for the CAR/SAM Regions, the NACC and SAM Regional Offices, using the GREPECAS fast-track procedure: a) circulate by 15 August 2015, Volumes I and II of the new eANP for CAR/SAM States approval; and b) circulate by 15 October 2015, Volume III of the new eANP for CAR/SAM States approval.
<b>PPRC DRAFT CONCLUSION 3/3</b>	CAR/SAM Regions Interface Control Document for AIDC Implementation between Adjacent Centres	That, for AIDC Implementation between adjacent centres, the following documents be adopted: a) ICD AIDC NAT/APAC v1.0 as a base document for AIDC interconnections between CAR and SAM Regions adjacent automatized centres; b) for the CAR Region, ICD NAM will be used; and c) for the SAM Region, ICD AIDC NAT/APAC v1.0, with a minimum set of AIDC messages (specified in the AIDC implementation guide through the adjacent automatized centres interconnection).

Conclusions / Decisions	Title of Conclusion / Decision	Text of Conclusion/Decision
<b>PPRC DRAFT CONCLUSION 3/4</b>	Actions for ATFM Implementation in the CAR Region	<p>That,</p> <p>a) concerning ATFM implementation projects, States and Territories in the CAR Region:</p> <p>i. avoid the implementation of ATFM measures adversely impacting safety and efficiency of air operations;</p> <p>ii. introduce in their bilateral Letters of Agreement, appropriate ATFM procedures to regulate strategic application of applicable ATFM measures;</p> <p>iii. implement as soon as possible, ATFM Positions (FMP) or ATFM units (FMU) in order to avoid an imbalance between capacity and demand, either by scheduled or by unforeseen events; and</p> <p>b) ICAO NACC Regional Office take the corresponding actions to develop a proposal for amendment to Doc 7030 concerning ATFM procedures and ATC minimum separation for aircraft transfer between adjacent Control Centres (ACC) counting with overlying radar coverage, as applicable, informing PPRC/4 meeting on the progress of such actions.</p>
<b>PPRC DRAFT CONCLUSION 3/5</b>	Actions for ATFM Implementation in the SAM Region	<p>That, States of the SAM Region:</p> <p>a) replicate at local level, the ATFM training obtained by their experts in courses under the auspices of RLA/06/901 Project, in order to increase ATFM training of their specialized personnel;</p> <p>b) avoid the implementation of ATFM measures affecting users and having an impact on safety, mainly those administrations not having established the units to strategically manage flow control measures;</p> <p>c) introduce in their bilateral Letters of Agreement the appropriate procedures to regulate strategical application of these measures, avoiding their impact on efficiency and safety;</p> <p>d) implement as soon as possible, Flow Management Positions (FMP) or Units (FMU), in order to avoid capacity-demand imbalance, even by scheduled or unforeseen events; and</p> <p>e) present to the PPRC/4 meeting actions performed according to preceding paragraphs.</p>
<b>PPRC DRAFT DECISION 3/6</b>	Establishment of a Working Group to Obtain better AMHS Operational Use	<p>That, in order to exploit AMHS potentialities and take advantage of its operational use:</p> <p>a) a working group is formed by Brazil, Dominican Republic, United States and D Programme coordinators in the CAR and SAM Regions for ground-ground and air-ground communications infrastructure;</p> <p>b) the working group will work through virtual meetings and will prepare a strategy to ensure AMHS operational use, providing it to the Region disposal as soon as practicable.</p>



Conclusions / Decisions	Title of Conclusion / Decision	Text of Conclusion/Decision
<b>PPRC DRAFT CONCLUSION 3/7</b>	Consultation to the CAR/SAM Region States on e-TOD Compliance Date	That: a) GREPECAS Secretariat consult CAR/SAM Region States on e-TOD implementation compliance expectations by 12 November 2015; and b) in case that, more than 50% of the CAR/SAM Region States could not implement on the date foreseen by the standard, the fast track procedure be used to adopt a conclusion on the convenience to amend Annex 15 extending the implementation date.
<b>PPRC DRAFT CONCLUSION 3/8</b>	ICAO Documentation for AIM	That, the GREPECAS Secretariat send an IOM to D/ANB requesting to prioritize the completion of Doc 9839 on AIM quality and have as soon as practicable a final version of the Doc 9881 on electronic terrain and obstacle data.
<b>PPRC DRAFT CONCLUSION 3/9</b>	Revision of the MET Programme and its Tasks	That, a) QMS/MET implementation be measured by certification, through a QMS certifying firm on aeronautical meteorology services; b) States that have obtained QMS/MET system certification, submit a copy of their certificates to the Secretariat; c) The ICAO NACC and SAM regional offices review the procedures of volcanic ash SIGMET exercises to ensure the participation of those under the Washington VAAC responsibility; and d) The ICAO NACC and SAM Regional Offices carry out workshops on SIGMET to ensure the preparation of these messages and the correct utilization of the formats contained in ICAO Annex 3.
<b>PPRC DRAFT CONCLUSION 3/10</b>	Development of Air Navigation Plans Aligned with the GANP and the Regional Performance-Based Air Navigation Plans	That, the CAR/SAM Regions States that have not yet amended or developed their National Plans aligned with the Global Air Navigation Plan (GANP) (4th edition) and the RPBANIP and SAM PBIP, complete them shortly in order to harmonize the implementation and facilitate the interoperability of systems and inter and intra-regional air navigation systems and services.

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**FORM TO FOLLOW UP ON THE PROGRESS ON INDICATORS AND TARGETS FOR THE  
CAR/SAM REGIONS BY GREPECAS  
Revision: July 2015**

Indicators		CAR		SAM	
		Current Value	Goal December 2016	Current Value	Goal December 2016
<b>1. PBN TERMINAL</b>	% of runways with APV instrument approach with Baro VNAV, in accordance with Resolution A-37/11	84.8%	80%	65.88%	100%
<b>2. PBN EN-ROUTE</b>	% of ATS routes with PBN	N/A	N/A	58%	60%
	% of international aerodromes with PBN SIDs/STARs	N/A	N/A	64.29%	60%
<b>3. CDO</b>	% of international aerodromes/TMAs with CDO	N/A	N/A	4,52%	40%
<b>4. CCO</b>	% of international aerodromes/TMAs with CCO	N/A	N/A	4,52%	40%
<b>5. Fuel / CO2 savings</b>	Reduction of emissions based on IFSET	Not available	Annual reduction of 40,000 Tons of CO2	2014-51,132 Tons of CO2	Annual reduction of 40,000 Tons of CO2
<b>6. ATFM</b>	% of Area Control Centres (ACCs) providing Air Traffic Flow Management (ATFM) service	60%	100% (by December 2018)	52%	100%
<b>7. AIM</b>	% of elements (AIS to AIM roadmap) required for AIS-to-AIM transition that have been implemented in Phase I	80%	100% Goal of the Phase 1 composed of 4 elements	84%	100%
<b>8. AMHS interconnection</b>	% of AMHS interconnections at regional level	N/A	N/A	20%	100%

Indicators		CAR		SAM	
		Current Value	Goal December 2016	Current Value	Goal December 2016
<b>9. Interconnection of automated systems (ATS inter-facility data communications – AIDC)</b>	% of automated system interconnections	81.82% (NAM/CAR)	50% of ACCs with at least 1 interface (AIDC/OLDI)	12%	100%
<b>10. Implementation of domestic IP networks</b>	% of SAM States with IP communication networks implemented	N/A	N/A	40%	80%
<b>*11. Aerodrome Certification (*)</b>	% certified aerodromes	35%	48%	12%	20%

(\*) Safety oversight issued but managed by GREPECAS

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**APPENDIX C  
eANP PROGRESS**

<b>ANP volume</b>	<b>eANP activity/task</b>	<b>Responsible</b>	<b>Completion date</b>	<b>Status</b>
Vol I, II & III	Inclusion of existing data on eANP	Regional Offices	September 2014	Completed
Vol I, II & III	Agreement on the content of the eANP	PIRGs/States	Mid 2015	completed
Vol I	Approval of Volume I of eANPs by the Council	Regional Offices/ANB	End 2015	Completed: 4 April 2016
Vol II	Approval of Volume II of eANPs by regional agreement involving the relevant PIRG	Regional Offices/PIRGs	<del>End 2015</del> / June 2016	Valid
Vol III	Development and approval of Part II under PIRG responsibility. Inclusion of Volume III on web-based platform.	Regional Offices/PIRGs/ANB	End 2016	Valid
Consequential amendments	Amendments to existing ICAO documentation related to ANPs to ensure harmonization, including the Regional Office Manual, and review of the applicability of the Uniform methodology for the identification, assessment and reporting of air navigation deficiencies to the new ANP.	ANB	ongoing	Valid

— END —