



**FINAL
VERSION**

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE

THIRTY-SECOND EASTERN CARIBBEAN WORKING GROUP MEETING

(E/CAR/WG/32)

FINAL REPORT

Sint Maarten, Netherlands Antilles
15 to 18 June 2010

Prepared by the Secretariat
June 2010

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HISTORICAL

ii.1 Place and Date of the Meeting

The Thirty-Second Eastern Caribbean Working Group Meeting (E/CAR/WG/32) was held at the Westin St. Maarten Dawn Beach Resort & Spa in Sint Maarten, Netherlands Antilles, from 15 to 18 June 2010.

ii.2 Opening Ceremony

Mr. Julio Siu, Regional Officer, Communications, Navigation and Surveillance, provided introductory remarks and thanked the Princess Juliana International Airport (PJIAE) for hosting the Meeting, on behalf of Mrs. Loretta Martin, Regional Director of the North American, Central American and Caribbean (NACC) Regional Office of the International Civil Aviation Organization.

Dr. Eugene Holiday, President of PJIAE provided some remarks on the importance of the E/CAR/WG meeting agenda issues and said that hosting this ICAO meeting came at an appropriate and interesting time for the island since Sint Maarten is preparing to change its constitutional status to that of an autonomous country within the Kingdom of the Netherlands in less than four months. Mr. Frans Richardson, Commissioner of Sint Maarten's Tourism and Aviation also addressed participants and mentioned that Sint Maarten will be establishing its own civil aviation authority to assume regulatory and oversight responsibilities for aviation matters on the island. Mr. Richardson mentioned that with this change of status, Sint Maarten will play a larger role in regional meetings of this nature in the near future. Finally, Mr. Richardson welcomed participants to Sint Maarten, and officially opened the Meeting.

ii.3 Organisation of the Meeting

Mr. Anthony Meade, Acting Director, Air Navigation Services of the Eastern Caribbean Civil Aviation Authority (ECCAA) acted as Chairman of the E/CAR/WG. Mr. Julio Siu, Regional Officer, Communications, Navigation and Surveillance, acted as Secretary with the assistance of Mr. Raúl Martínez, Regional Officer, Aeronautical Information Management both from the ICAO NACC Regional Office.

ii.4 Working Language

The working language of the Meeting was English. The working papers, discussion papers, information papers and the report of the Meeting were available to participants in English.

ii.5 Agenda

The Meeting adopted the following agenda:

Agenda Item 1: Review and Approval of the Draft Agenda and Schedule

Agenda Item 2: Air Navigation Matters

- 2.1 Implementation of the NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (NAM/CAR RPBANIP)
- Optimization of the ATS route structure in the en-route airspace
 - Optimization of the ATS route structure in the terminal airspace
 - Implementation of RNAV/RNP (PBN) approaches
 - Enhancements to civil/military coordination and cooperation
 - Alignment of upper airspace classification
 - Improvement of demand/capacity balance
 - Improvement of ATM situational awareness
 - Enhancements to the search and rescue (SAR) system
 - Implementation of the New ICAO Flight Plan Format
 - Protection and optimal use of the radiofrequency spectrum
 - Optimization and modernization of the communication infrastructure
 - Implementation of WGS-84 and e-TOD
 - Transition of AIS towards AIM
 - Enhance the capacity and efficiency of aerodrome operations
 - Improve the availability of meteorological information
- 2.2 Development of metrics and performance goals
- 2.3 Other Specific Air Navigation Developments
- 2.3.1 Aerodromes and Ground Aids (AGA)
- PANS-AGA
 - Aerodrome Mapping Information based on e-TOD
 - Runway Safety
- 2.3.2 Aeronautical Information Management (AIM)
- States SARPs compliance for first phase activities to the transition to AIM
 - e-TOD developments for Areas 1 and 4 in accordance with State Letter AN 2/2-10/18 dated 1 April 2010
 - Follow-up on GREPECAS Conclusion 14/39 for the use of geographic information system in AIM
- 2.3.3 Air Traffic Management (ATM)
- Update of ATS Contingency Plans
 - Follow-up on Assembly Resolution A36/23 regarding the implementation of PBN APV (BARO/VNAV) procedures
 - PBN airspace concept for the E/CAR

- 2.3.4 Communications, Navigation and Surveillance (CNS)
 - E/CAR NTG activities
 - Relevant aspects in support of ICAO position concerning the ITU-2012

- 2.3.5 Aeronautical Meteorology (MET)
 - Coordination among meteorological (MET) services and Air Traffic Control Services (ATS)

- 2.4 Human Resources Strategy and Training for the Next Generation of Aviation Professionals (NGAP)

Agenda Item 3: Follow-up on the Actions Taken on Valid Conclusions/Decisions from Previous Meetings and Review of the Terms and Reference (ToRs) of the E/CAR/WG

- 3.1 Review of the Conclusions/Decisions of the Previous E/CAR/WG and E/CAR/DCA Meetings
- 3.2 Review of the Terms of Reference (ToRs) of the E/CAR/WG

Agenda Item 4: Other Business

- 4.1 Host and Dates for the Next Meeting

ii.6 Schedule and Work Mode

The Meeting agreed to hold its daily sessions from 09:00 to 15:30 hours, with two breaks. The Meeting also agreed to work in plenary. Ad-hoc Groups were created during the Meeting to do further work on specific items of the Agenda.

ii.7 Attendance

The Meeting was attended by 9 E/CAR Region States/Territories, 2 International Organisations and 1 service provider, totalling 33 delegates as indicated in the list of participants on pages iii-1, iv-1 to iv-4.

ii.8 **Conclusions and Decisions**

The Eastern Caribbean Working Group recorded its activities as Decisions and Draft Conclusions as follows:

Decisions Internal actions of the E/CAR/WG

Draft Conclusions Actions requiring communication to States, Territories, International Organizations and/or endorsement by the E/CAR DCAs.

Note: Draft Conclusions can be approved by correspondence in between Meetings

LIST OF DRAFT CONCLUSIONS ADOPTED BY THE E/CAR/WG/32 MEETING

Number	Title	Page
32/1	PBN Implementation Activities	2-3
32/3	RNAV/RNP Procedures Implemented	2-9
32/4	PBN Airspace Concept	2-10
32/5	E/CAR AFS Network Deficiencies	2-13
32/6	E/CAR AFS Network Fault Reporting System by E-Mail	2-15
32/7	CAR Regional Aviation Training Plan	2-19
32/8	Member Designation for the E/CAR Committees	3-3

LIST OF DECISIONS ADOPTED BY THE E/CAR/WG/32 MEETING

Number	Title	Page
32/2	E/CAR Region Progress in the Implementation of the NAM/CAR RPBANIP	2-5

ii.9 List of Working, Discussion and Information Papers

Working, Discussion and Information Papers are available on the ICAO website at the following link: <http://www.mexico.icao.int/Meetings/ECARWG32.html>

Number	Agenda Item	WORKING PAPERS		
		Title	Date	Prepared and Presented by
WP/01	1	Draft Agenda and Schedule of the E/CAR/WG/32 Meeting	17/05/10	Secretariat
WP/02	2.1	Air Navigation Services Operational Implementation Scenario	04/06/10	Secretariat
WP/03	2.2	Performance Monitoring and Measurement	02/06/10	Secretariat
WP/04	2.3.1	Electronic Terrain, Obstacle and Aerodrome Mapping Information	23/04/10	Secretariat
WP/05	2.3.1	Runway Safety	23/04/10	Secretariat
WP/06	2.3.2	e-TOD Developments for Areas 1 to 4	01/06/10	Secretariat
WP/07	2.3.2	Follow-up to GREPECAS Conclusion 14/39 for the use of Geographic Information System (GIS) in AIM	10/06/10	Secretariat
WP/08	2.3.3	Update of ATS Contingency Plans	02/06/10	Secretariat
WP/09	2.3.3	Follow-up to Assembly Resolution A36/23 on the Implementation of PBN APV (BARO/VNAV) Procedures	02/07/10	Secretariat
WP/10	2.3.3	PBN Airspace Concept for the CAR Region	02/06/10	Secretariat
WP/11	2.3.4	E/CAR/NTG/1 Meeting Report	09/06/10	E/CAR/NTG Rapporteur
WP/12	2.3.4	States' Support to the ICAO Position for the ITU Radio Communication Conference 2012 (WRC-2012)	12/05/10	Secretariat
WP/13	2.3.5	Aeronautical Meteorological Service in the Eastern Caribbean Region	04/06/10	Secretariat
WP/14	2.4	Strategic Enhancements to Human Resources Training and Management	04/06/10	Secretariat
WP/15	3.1	Valid Conclusions / Decisions Review	03/06/10	Secretariat
WP/16	3.2	Update to the Terms of Reference (ToRs) and Work Programme of the E/CAR/WG	28/05/10	Secretariat
WP/17	4	Eastern Caribbean Working Group Web Page	03/06/10	Secretariat

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WORKING PAPERS				
Number	Agenda Item	Title	Date	Prepared and Presented by
WP/18	2.1	Implementation of Amendment 1 to PANS-ATM, Doc 4444, 15 th Edition	03/06/10	United States
WP/19	2.3.3	ATC Facility Coordination Errors	03/06/10	United States
WP/20	2.3.4	Plans for Federal Aviation Administration Packet Switched Network (X.25) Decommissioning	03/06/10	United States
WP/21	2.3.5	Development of File Servicer in Support of International Satellite Communication System	03/06/10	United States
WP/22	3.2	Terms of Reference of the E/CAR/WG Committees	08/06/10	Secretariat
WP/23	2.1	Surveillance Solutions	08/06/10	Barbados
WP/24	2.1	Implementation of RNAV/RNP (PBN) Approaches	08/06/10	Barbados
WP/25	2.1	Employment of an Augmentation System in the E/CAR Region	08/06/10	Barbados
WP/26	2.3.2	Development of an Effective AIS Infrastructure in the E/CAR Region	08/06/10	Barbados
WP/27	2.3.4	E/CAR AFS Network Performance	09/06/10	Trinidad and Tobago
WP/28	2.3.4	New E/CAR AFS Network	09/06/10	Trinidad and Tobago

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DISCUSSION PAPERS				
Number	Agenda Item	Title	Date	Prepared and Presented by
DP/01	2.1	AIS Committee Report	16/06/10	AIS Committee
DP/02	2.1	CNS Committee Report of Activities	16/06/10	CNS Committee
DP/03	2.1	Report of the Ad Hoc Meeting of the E/CAR/WG AGA Committee	16/06/10	AGA Committee
DP/04	2.1	Summary of Discussions of the ATM Ad Hoc Group	17/06/10	ATM Committee
DP/05	2.1	SAR Committee Report	17/06/10	Trinidad and Tobago for the Rapporteur of the SAR Committee

INFORMATION PAPERS				
Number	Agenda Item	Title	Date	Prepared and Presented by
IP/01	--	List of Working and Information Papers	14/06/10 <i>Revised</i>	Secretariat
IP/02	2.3.4	Updates to CNS SARPs and Future Work of the CNS ICAO Panels	12/05/10	Secretariat
IP/03	2.3.1	Development of a PANS-AGA Document	23/04/10	Secretariat
IP/04	2.3	ICAO NACC Regional Office Meetings, Seminars, Courses and Workshops – Tentative Schedule	02/06/10	Secretariat
IP/05	4.1	Host and Dates for the Next Meeting	01/06/10	Secretariat
IP/06	2.3.2	States SARPs Compliance for First Phase Activities for the Transition to AIM	01/06/10	Secretariat
IP/07	2.3.1	Federal Aviation Administration (FAA) Research on Aerodrome Performance Metrics	10/06/10	United States
IP/08	2.1	Proposed Goals and Working Methods of the Eastern Caribbean Working Group (E/CAR/WG) Aerodromes and Ground Aids (AGA) Committee	14/06/10	United States
IP/09	2.3.1	Compilation of Aerodrome Data to Supplement Search and Rescue (SAR) Operations	14/06/10	United States
IP/10	2.1	AIS Committee Report	15/06/10	Rapporteur of the AIS Committee

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Lindon G. Hodge

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List of Participants

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LIST OF PARTICIPANTS

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Thirty-Second Eastern Caribbean Working Group Meeting
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Agenda Item 1: Review and Approval of the Draft Agenda and Schedule

Tribute to the members of the Civil Aviation Authorities of the Netherlands Antilles and Eastern Caribbean who were lost in the earthquake in Haiti.

1.1 At the commencement of the plenary session the Chairman offered a short tribute to Dr. Siegfried Francisco (Director General) and Capt. Auxencio (Angelo) Isenia of the Civil Aviation Authority of the Netherlands Antilles and Messrs. Rosemond James (Director General) and Gregory McAlpin of the Eastern Caribbean Civil Aviation Authority who were lost in the earthquake in Haiti, recalling that during the last meeting of the group and the subsequent E/CAR DCA's meeting shortly thereafter, the tragedy of the earthquake could not have been foreseen, and that it was ironic that this meeting was now being hosted by the Netherlands Antilles whose Authority is forever linked to that of the Eastern Caribbean by their mutual loss.

1.2 Special mention was made of their families, and in particular the family of Dr. Francisco who had to endure the extra long agony of waiting for the closure that they eventually were able to receive.

1.3 Having the presence of Mr. Alexis Brathwaite, the Meeting offered their sincerest congratulations on the occasion of his recent appointment as the President and CEO of IFATCA.

Approval of the Agenda and Schedule

1.4 After the tributes mentioned above, the Secretariat presented WP/01 inviting the Meeting to approve the draft meeting agenda and schedule. The Meeting approved the meeting agenda as presented in the historical section of this Report with minor modifications to the meeting schedule.

Agenda Item 2: Air Navigation Matters

2.1 Implementation of the NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (NAM/CAR RPBANIP)

2.1.1 Under WP/02, the Secretariat informed about the updates to the NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (NAM/CAR RPBANIP) since the E/CAR/WG/31 Meeting, which resulted from the discussion of this matter from the other subregional working Groups. The result is version 1.0 (May 2010), which is also available on the ICAO NACC Regional Office web page (www.mexico.icao.int), under the Regional Group sections of each working group.

2.1.2 The updated NAM/CAR RPBANIP, which is developed using Regional Performance Objectives (RPO), contemplates tasks, implementation dates, responsible entity and status of compliance of each task. The plan was developed with project management techniques and has an implementation horizon for 2010 to 2016.

2.1.3 The RPBANIP has 15 regional performance objectives with operational improvements in all the air navigation fields as follows:

1. En-route airspace ATS route structure optimization;
2. Terminal airspace ATS route structure optimization;
3. RNP approaches implementation;
4. Improvements to civil-military coordination and co-operation;
5. Alignment of upper airspace classification;
6. Improvement of demand-capacity balance (ATFM);
7. Improvement of ATM situational awareness;
8. Implementation of the new flight plan format;
9. Improvement of the SAR system;
10. Improvement of the capacity and efficiency of aerodrome operations;
11. Protection and optimal use of the radiofrequency spectrum;
12. Optimization and modernization of the communication infrastructure;
13. Implementation of WGS-84 and e-TOD;
14. Implementation of the transition towards AIM; and
15. Improvement of the availability of meteorological information.

2.1.4 The Meeting was informed of the relation of the Global Plan Initiatives (GPIs) and RPOs as detailed in Appendix A to WP/02. In this same regard, the RVSM initiative, harmonization of flight levels and the classification A of the upper air space have now been completed.

2.1.5 Appendix B to WP/02 provided the meeting with the action plans for the RPOs, as well as the expected E/CAR/WG/32 results for CNS and MET. In addition, the meeting was informed of the different Committees progress and achievements for the NAM/CAR RPBANIP. The E/CAR/WG Committee reports were presented as DP/01 (AIS), DP/02 (CNS), DP/03 (AGA), DP/04 (ATM) and DP/05 (SAR) to this meeting.

2.1.6 The E/CAR States and Territories should develop their performance-based implementation plans for the next five years, identifying those RPOs that may be adapted into their own needs and ensuring integration and harmonization of air navigation systems and infrastructure with adjacent States/Territories and Regions.

2.1.7 The Meeting was also informed of the three ICAO events that have been scheduled to support the implementation of PBN (RPO 1-3), Situational Awareness (RPO 7) and the new FPL format (RPO 8). These events are:

ICAO Workshop on the Development of a Performance-Based Navigation (PBN) airspace concept for the CAR Region

(Mexico City, Mexico, 5 to 7 July 2010)

Information available at: <http://www.mexico.icao.int/Meetings/PBNDevelopment.html>

ICAO Workshop on ATM Situational Awareness Improvements for the NAM/CAR Regions

(Mexico City, Mexico, 8 to 10 July 2010)

Information available at: <http://www.mexico.icao.int/Meetings/ATMAwareness.html>

ICAO Workshop for the Implementation of the New Flight Plan Format for the NAM/CAR Regions

(Mexico City, Mexico, 12 to 13 July 2010)

Information available at: <http://www.mexico.icao.int/Meetings/FlightPlan.html>

2.1.8 Due to the importance of the items to be discussed on the above-mentioned events, the Meeting considered essential to encourage the participation of E/CAR States and Territories. The advances and achievements reported by the E/CAR/WG on these issues will be reported to the forthcoming NACC/WG/3 and NACC/DCA/4 Meetings, as well as the next Global Air Navigation Conference (AN-Conf/12) scheduled for 2012, where implementation progress and the new air navigation needs will be analyzed.

RPO 1-3: PBN Implementation

2.1.9 While reviewing the progress in the implementation of RPO 1-3 related to PBN implementation, and considering the observations provided by Barbados in its WP/24, the Meeting considered that the E/CAR Region should try to accomplish the benefits of the PBN implementation in a shorter time than the established in the NAM/CAR RPBANIP.

2.1.10 After consultation and agreement with the Air Navigation Service Providers (ANSPs) of States/Territories/ECCAA within the E/CAR, the Trinidad and Tobago Civil Aviation Authority should issue the appropriate Aeronautical Information Circular (AIC) informing Aircraft Operating Agencies, Aircraft Owners and Operators, and Pilots on the proposed implementation of Performance Based Navigation (PBN) on a phased basis within the Piarco FIR as of 1 December 2011 through to end 2015. PBN Procedures will be implemented in the enroute and terminal phases of operations and therefore, Aircraft Operating Agencies, Aircraft Owners and Operators are required to have their pilots trained as appropriate and their aircraft equipped to meet the required capabilities prior to implementation of the various phases of PBN implementation as contained in the relevant AIC. In this regard, the Meeting formulated the draft conclusion:

DRAFT

CONCLUSION 32/1

PBN IMPLEMENTATION ACTIVITIES

In order to accomplish the tasks and enjoy the benefits from PBN implementation, that:

- a) all E/CAR States/Territories develop and implement RNAV/RNP (PBN) Approaches by **31 December 2011**;
- b) Trinidad and Tobago Civil Aviation Authority after the consultation and agreements with ANSPs, issue the corresponding AIC on PBN implementation in the E/CAR Region by **31 December 2010**; and
- c) inform the ICAO NACC Regional Office of the progress in these activities no later than **28 February 2011**.

2.1.11 The Meeting commented that some of the publications of the PBN Procedures have had some problems with the names of the waypoints being used. In this regard, the Secretariat pointed out that the names for these codes (5-letters name codes) can easily be verified and assigned through the ICAO ICARD Database (<http://www.mexico.icao.int/ICARD.html>).

RPO 8: New Flight Plan Implementation

2.1.12 Under WP/18 the United States informed the Meeting on their activities carried out with Canada and Mexico, as well as worldwide for the implementation of the new ICAO Flight Plan format.

2.1.13 In view of the many implications affecting a wide range of automated flight plan processing systems and the associated operating practices, the States/Territories should assess compatibility of existing automated systems, human factors, training, etc. Any incompatibility with the processing capability in a few States could have significant impact on operations in other E/CAR States, which has the potential to create a significant degradation of ATM services.

2.1.14 The Secretariat informed the Meeting that ICAO has developed a website, Flight Plan Implementation Tracking System (FITS), to support a coordinated global effort towards the implementation of Amendment 1 to the PANS-ATM, Doc 4444 on the new Flight Plan Format. The FITS provides information on the implementation status of the new flight plan provisions in each State, along with guidance and harmonized solutions to difficulties encountered in the process. It can be accessed at: <http://www2.icao.int/en/FITS/Pages/home.aspx>.

2.1.15 The Meeting was informed that the GREPECAS CNS/ATM/SG developed and adopted a CAR/SAM Regional Strategy for the implementation of the new FPL format, denoted “Strategy for the implementation of Amendment 1 to the 15th edition of the ICAO PANS-ATM -Doc 4444- in the CAR/SAM Regions”, which harmonizes implementation dates and phases adopted by other ICAO Regions. This strategy considers the benefits, tasks, timelines and responsible parties and all the information outlined in the NAM/CAR RPBANIP under the RPO “Implementation of New Flight Plan Format”.

2.1.16 Based on this strategy, it is critical that States and Air Navigation Service Providers (ANSPs) develop their national action plans in accordance with the dates and activities, share this information on implementation of Amendment 1 with the Region and participate actively in the FITS and ICAO NACC Regional Office FPL related events.

2.1.17 In this regard, the ICAO Workshop for the Implementation of the New Flight Plan Format will provide information on said Amendment, share case studies on implementation, and provide for questions and answers related to this matter. More details on this workshop are available at: <http://www.mexico.icao.int/Meetings/FlightPlan.html>.

2.1.18 Also, the Meeting recognized that, in order for States and ANSPs to fully understand the changes contained in Amendment 1, so they can carry out the changes to automation and procedures with sufficient time to support the dates contained in the CAR/SAM Regional strategy, it is required to establish close consultation with neighboring States and ANSPs, so that interfaces and manual coordination procedures can be successfully updated.

RPO-9 Improve SAR System

2.1.19 In reference to the E/CAR/DCA Conclusion 22/2, the SAR Committee Rapporteur indicated the lack of reply from the E/CAR States/Territories regarding the SAR Matrix. In this regard, the Meeting urged States/Territories to reply with at least the status of completion of the matrix (ongoing, n%, etc.), no later than 20 October 2010, to the SAR Committee Rapporteur. The SAR points-of-contact were received by the SAR Committee Rapporteur.

RPO-12 Optimization and Modernization of Communization Infrastructure

2.1.20 Regarding the Radar Data sharing activities in the E/CAR Region, and the observations presented by Barbados in WP/23, the Meeting was informed that French Antilles should be capable of integrating Barbados in the Dacota System by 2011. The CNS Committee report provides complementary information on this matter.

2.1.21 Under WP/25 Barbados informed the Meeting of the current two ICAO Regional Technical Cooperation Projects RLA/09/801 and RLA/03/902, which have been forwarded to States for participation. Several issues were discussed related to the participation to these projects, and the Secretariat informed that for the RLA/09/801 a Consultation Meeting will be carried out on 19 July 2010 before the C/CAR/DCA Meeting in the ICAO NACC Regional Office so all the suggestions and recommendations made for this project can be presented in the Consultation Meeting. The RLA/03/902 is an on-going Project named SACCSA, to support States in the study of SBAS and GNSS.

2.1.22 As a result of the States inputs to the plan and the Committee information, a NAM/CAR RPBANIP Achievement Table for PIARCO and San Juan FIRs was prepared. A preliminary version of this table is presented as **Appendix A** to this part of the report. The Meeting agreed that States are to submit their input to the Achievement Table to the ICAO NACC Regional Office, no later than 30 June 2010, for its inclusion in the final version of this table.

2.1.23 Considering that the E/CAR/WG will not be meeting next year, due to the NACC/WG/3 meeting in April 2011, to be held in Guatemala, and with the objective to have the latest information available on the E/CAR Region for this NACC/WG/3 Meeting, the Meeting agreed on the following Decision:

DECISION 32/2

**E/CAR REGION PROGRESS IN THE IMPLEMENTATION OF
THE NAM/CAR RPBANIP**

In order to present the latest information of the E/CAR Region in relation to the Implementation of the NAM/CAR RPBANIP to the NACC/WG/3 Meeting, that:

- a) the E/CAR/WG prepare a report of the progress in the implementation of the NAM/CAR RPBANIP and a follow-up of benefits achieved due to this implementation; and
- b) send to the ICAO NACC Regional Office this report no later than **28 February 2011**.

2.2 Development of metrics and performance goals

2.2.1 In line with E/CAR/WG Conclusion 31/9 – *Air Navigation Performance Monitoring and Measurement*, the Meeting reviewed the initial performance metrics presented in WP/03 and informed of their metrics as a result of the work developed by the E/CAR/WG. This information was organized in a table denoted NAM/CAR RPBANIP Metrics Table. A preliminary version of this table is shown in **Appendix B** to this part of the report. The Meeting agreed that States are to submit their input to the Metrics Table to the ICAO NACC Regional Office, no later than 30 June 2010, for its inclusion in the final version of this table.

2.2.2 The Meeting was informed by the United States, under IP/07, on the research activities of the FAA on aerodrome performance metrics with the projects currently underway within the FAA's Airport Cooperative Research Program (ACRP).

2.3 Other Specific Air Navigation Developments

2.3.1 Aerodromes and Ground Aids (AGA)

2.3.1.1 The Meeting was informed on the importance of the new provisions from Annex 15 for the electronic terrain and obstacle data (e-TOD) requirements, and their availability required by Annex 14 by 15 November 2012, for Area 2 (Terminal Control Area) and Area 3 (Aerodrome/Heliport Area), specifications that should be facilitated by appropriate advanced planning for the collection and processing of such data associated with the implementation of aerodrome mapping information based on e-TOD.

2.3.1.2 In order to ensure consistency across the e-TOD applications, a Geographical Information System (GIS) can be used for a dataset with the capability of spatial information. For example, data can be visualized as in the real world and thus, can create a common language for the aerodrome organization to use.

2.3.1.3 Regarding the issues discussed on this matter during the Meeting, the following suggested actions were adopted:

- a) To review ICAO Document 9881 that contains information on Electronic Terrain, Obstacle and Aerodrome Mapping Information;
- b) To take appropriate activities to develop the State's e-TOD implementation plan of electronic terrain and obstacle data for Areas 2 and 3.

2.3.1.4 Furthermore the Meeting recognized that runway safety is a collective responsibility that extends to aerodrome operators, air navigation service providers, and the aircraft operators, while there are several incidents due to runway incursions (ICAO Doc. 9870 AN/463 Manual on the Prevention of Runway Incursions), and excursions that may have catastrophic consequences, these events continue to happen and airport authorities need to maintain their efforts to reduce the occurrence.

2.3.1.5 The Meeting was informed that ICAO has developed SARPs, guidance material and toolkits to address various aspects of runway safety and has held a series of seminars to raise situational awareness. In addition, the ICAO Runway Safety Programme is envisioned to provide a forum including regulators, aircraft operators, air traffic management, aerodromes and aircraft manufacturers. Also ICAO's dedicated focus on runway safety efforts consisted of a series of Seminars in ICAO Regions to disseminate information on the prevention of Runway Incursions (RIs) and Runway Excursions (REs), more information is available in **Appendix C** to this part of the Report.

2.3.1.6 The Meeting, according to information discussed on this issue, agreed to the following actions:

- a) to analyze the practices detailed in Appendix C, for preventing runway incursions/excursions and enhance runway safety;
- b) make use of the ICAO Runway Safety Toolkit; and
- c) based on the information provided in items a) and b), urge the E/CAR States/Territories to inform the ICAO NACC Regional Office the best practices implemented for preventing runway incursions by **25 February 2011**.

2.3.1.7 The review of the aerodrome provisions in Annex 14, Volume I, would not resolve all the safety and efficiency challenges facing existing aerodromes worldwide. Therefore there is increasingly a need to develop Procedures for Air Navigation Services – Aerodrome Operations (PANS-AGA).

2.3.1.8 The Procedures for Air Navigation Services – Aerodrome Operations (PANS – AGA) would be complementary to the SARPs contained in Annex 14, Volume I, approved by the Council and recommended to Contracting States for worldwide application of which the first draft will be ready by the end of 2011.

2.3.1.9 The Meeting was invited to review the ICAO Working Paper AN-WP/8379, attached in the Appendix to IP/03, which was prepared for the Air Navigation Commission titled “Feasibility study on the development of PANS-AGA.”

2.3.1.10 The Meeting emphasized the benefit of a State's aerodrome and airfield database for use by international relief organizations in responding to a crisis like the recent tragedy involving the earthquake in Haiti. This information can be used in support to the Search and Rescue plans already in place for each E/CAR member State by military and civilian organizations providing assistance.

2.3.1.11 The Secretariat expressed that the Eastern Caribbean States and Territories should compile and integrate a database using their data published in their own AIPs that can be used as unrestricted information for aerodromes and airfields as a precautionary measure to assist international relief efforts should a crisis occur in some possible future scenario.

2.3.1.12 Finally the Meeting reviewed the AGA issues presented to the members that strongly supported the formation of an AGA Committee. The members considered that such a committee would be beneficial to the progress of the member States in resolving GANDD deficiencies and implementing the NAM/CAR RPBANIP. The members also agreed that the formation of an AGA Committee was appropriate and could function as a complementary unit within the framework of the E/CAR/WG, as the future AGA Committee activities are in-line with Terms of Reference (ToRs) and Work Programme of the E/CAR/WG. A discussion paper containing the results of the ad-hoc meeting of the AGA Committee, and a detailed list of the proposed AGA Committee Action Plan, were submitted to the Secretariat for review by the E/CAR/WG. The members recommend that formal implementation of the AGA Committee proceed within the E/CAR/WG. The members also recommend that current and future Regional AGA-related actions should be coordinated by the AGA Committee members in conjunction with the input and guidance of the ICAO NACC Regional Office.

2.3.2 *Aeronautical Information Management (AIM)*

2.3.2.1 The E/CAR States and Territories were requested to develop a draft plan for the implementation of the e-TOD Areas 1 to 4 and related activities according to the proposal for Amendment 36 to ICAO Annex 15 sent by State Letter Ref: AN 2/2-10/18 dated 1 April 2010. The Secretariat also urged States/Territories to give highest importance and priority to the implementation of e-TOD which has a direct link with all Air Navigation Areas main projects specially on ATM and AGA fields, emphasizing that the e-TOD implementation requires personnel with particular knowledge profile and skills on Geographical Information System, that can be achieved only with an appropriate training programme.

2.3.2.2 In addition, the Secretariat emphasized to the Meeting that the Air Navigation Commission on 12 March 2009 carried out a preliminary review of some of the most important changes which would be introduced to Annex 15, Chapter 10 and Appendix 8 on e-TOD. A summary of those changes were included in WP/06.

2.3.2.3 The importance of the quality of the e-TOD datasets is to make an inventory and evaluate the quality of existing terrain and obstacle data sources and in the case of data collection, carefully consider the required level of details of collected terrain and obstacle data with particular emphasis on obstacle data and its associated cost. The E/CAR States and Territories were requested to take action regarding the need that e-TOD requirements have on both technical and institutional perspectives, in particular, those relating to the provision of data for Area 2.

2.3.2.4 Taking into account the information provided by the Secretariat the E/CAR States and Territories were invited to:

- a) develop their State plan for the implementation of the e-TOD (Areas 1 to 4) by **November 2011**, according to the proposal for Amendment 36 to ICAO Annex 15 that must include legal and institutional regulations related to e-TOD;
- b) encourage coordination and cooperation among E/CAR States, in order to reach the implementation of e-TOD according to proposal for Amendment 36 to ICAO Annex 15 with the objective of improving the overall safety and efficiency of air navigation strategic objectives; and
- c) inform the ICAO NACC Regional Office on the progress of the above activities no later than **31 December 2010**.

2.3.2.5 The meeting was informed that ICAO is promoting the implementation of the electronic Aeronautical Information Publication (e-AIP), based on the need for a common platform for processing and exchange aeronautical information/data. In that respect the Secretariat emphasized to E/CAR States and Territories the need to implement a Geographical Information System (GIS) to produce AIM digital products. Taking into account AIM electronic environment requirements, the GREPECAS/14 Meeting adopted Conclusion 14/39 that urges States/Territories to take actions for the GIS implementation.

2.3.2.6 The Secretariat mentioned to the Meeting that in this context, ICAO is developing new e-AIP specifications that will standardize the use of digital tools in AIM. To support the e-AIP process it is necessary to have trained personnel on Geomatics for the GIS technology (gathering, storing, processing, and delivering geographic information, or spatially referenced information).

2.3.2.7 The Meeting was reminded that E/CAR States and Territories need to inform the ICAO NACC Regional Office regarding their GIS implementation progress no later than **31 December 2010**.

2.3.2.8 The Meeting discussed the status of AIS and its related issues in the E/CAR Region and it was mentioned that since 2006, at every E/CAR/WG Meeting only Barbados and Trinidad and Tobago have brought AIS matters to the attention of the E/CAR/WG. Apparently, other States and Territories within the region do not exhibit the required interest in AIS. As a result, it is difficult to understand how the E/CAR will transition to AIM if most States do not have properly established AIS Offices.

2.3.2.9 It is suggested by the Meeting that before consideration is given to the transition of AIS towards AIM in the E/CAR Region, that the E/CAR/WG establishes a Regional AIS System supported by all States and Territories, with an infrastructure, responsibilities and a work programme to move the Region forward on this important issue.

2.3.2.10 The Meeting requested that:

- a) ICAO encourage all E/CAR States to establish dedicated AIS Offices and urge States to take the following actions:
 - each State should appoint an officer in charge of the responsibility for AIS in that State and inform ICAO and the AIM Committee Rapporteur (Barbados) of the appointment; and
 - all E/CAR States should actively participate in AIS matters.

2.3.2.11 The Secretariat informed the Meeting that in order to meet the new ATM requirements, AIS has to make the transition to Aeronautical Information Management (AIM) in the medium term. In addition, the dimension of human factors needs associated with this change was recognized. ICAO is working to assist States in the transition process, in accordance with the AIS to AIM Roadmap (<http://www2.icao.int/en/anb/met-aim/aim/Pages/RoadmapfromAIStoAIM.aspx>). Nevertheless, each ICAO Contracting State is responsible for ensuring that these obligations are carried out, whether a State provides the services defined in Annex 15 itself directly, or not.

2.3.2.12 The Meeting agreed on the main AIM requirements and aviation technological advances that far exceed the scope of traditional AIS products, even in their newer digital format. As a result, it is evident and urgent that States/Territories and International Organizations must comply with the initial Phase 1 from the Roadmap as soon as possible. In consequence, the need to reach the institutional issues on time is fundamental and of high priority. It is also necessary to consider the ATS plans and implementation projects in order to assign particular priority to those activities related to PBN in which AIM has a relevant role.

2.3.2.13 In this regard, the meeting was requested to submit to the ICAO NACC Regional Office the questionnaire submitted to NAM/CAR States/Territories/International Organizations with the purpose to inform their AIS status on Annex 15 SARPs implementation.

2.3.3 *Air Traffic Management (ATM)*

PBN Implementation: RNAV/RNP Procedures

2.3.3.1 As a follow up to the ICAO Assembly Resolution A36/23 *Performance based navigation global goals*, a table with the implemented RNAV/RNP procedures per international airport was presented to the meeting (Appendix to WP/09). Considering the importance of this information, the meeting agreed that all States/Territories should inform the ICAO NACC Regional Office of any update to this information on implemented RNAV/RNP procedures by **15 December 2010**. In this regard, the meeting formulated the following Draft Conclusion:

DRAFT

CONCLUSION 32/3

RNAV/RNP PROCEDURES IMPLEMENTED

As a follow-up to PBN implementation in the E/CAR subregion, States/Territories should inform the ICAO NACC Regional Office of any update to the information presented in the Appendix to WP/09 related to implemented RNAV/RNP procedures by **15 December 2010**.

PBN Airspace Concept for the CAR Region

2.3.3.2 As a result of the RNAV routes implementation process in the upper airspace many benefits have been achieved by operators, users and air navigation services providers (ANSPs). Considering the possibility of implementing new RNAV routes, the Meeting was informed on a preliminary proposal on a PBN airspace concept for the CAR Region (Appendix to WP/10). This proposal shall consider an overall evaluation of the upper and lower airspace, taking in account:

- a) the review and implementation of routes, or the elimination of others, and introduction of amendments, as necessary;

- b) analyzing the ATS routes structure, on the basis of statistical data on traffic movement;
- c) optimizing the routes network design and the ATS airspace on the basis of traffic flows and expectations of the ATS users;
- d) describing a new ATS routes network proposal, upon the analysis of:
 - the implementation of PBN requirements for en-route and terminal area flights;
 - one- or two-way routes;
 - random routes;
 - the development of a performance monitoring and measuring programme;
- e) analyzing the operational use of GNSS;
- f) describing in detail the routes interface between the CAR and SAM Regions;
- g) proposing the application of continuous descent operations (CDO), where possible; and
- h) proposing regional ATS routes that should be realigned, eliminated or replaced by RNAV routes.

2.3.3.3 The Meeting agreed that the proposal of a PBN airspace concept could be gradually implemented in the short- and medium-terms by E/CAR States/Territories to improve the airspace organization and management (AOM). The E/CAR information provided by States/Territories will be presented in the workshop on a PBN airspace concept to be held in the ICAO NACC Regional Office from 5 to 7 July 2010. To this end, the Meeting adopted the following Draft Conclusion:

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CONCLUSION 32/4

PBN AIRSPACE CONCEPT

That E/CAR States/Territories:

- a) review and provide comments to the PBN airspace concept for the CAR Region, included in the Appendix to WP/10;
- b) review and propose improvements to the RNAV routes network and PBN procedures (RNAV/RNP) for airspace and international airports within the Piarco FIR;
- c) participate in the PBN airspace concept Workshop for the CAR Region to be held in ICAO NACC Regional Office from 5 to 7 July 2010; and
- d) inform the ICAO NACC Regional Office by 30 January 2011 of the progress achieved on actions indicated in items a) and b).

Update of ATS Contingency Plans

2.3.3.4 The Meeting was informed of the ATS contingency plans of all the CAR Region FIRs, kept by the ICAO NACC Regional Office. Some of these plans have occasionally been activated, and the ICAO Council and Air Navigation Bureau have been informed on the actions taken. The status of the ATS contingency plans was presented in the Appendix to WP/08 and an update was provided by the meeting, presented as **Appendix D** to this part of the report.

ATC Facility Coordination Errors

2.3.3.5 The United States informed the Meeting on safety concerns related to incorrect air traffic control (ATC) coordination when flights cross an adjacent Area Control Centre (ACC) boundary and the importance of filing altitude deviation reports with the Caribbean and South American Monitoring Agency (CARSAMMA) and presented initial steps to help reduce safety risk attributed to Large Height Deviations (LHD). WP/19 provides the details on the evaluation and results obtained.

2.3.3.6 The Meeting recalled that at the previous E/CAR/WG Meeting, States were urged to take measures to reduce operational errors in the ATC coordination loop between adjacent Area Control Centres (ACCs), including early implementation of ATS Interfacility Data Communication (AIDC). The meeting received information on ICAO Circular 314, Threat and Errors Management (TEM) and Normal Operations Safety Survey (NOSS). E/CAR States and Territories also agreed to develop an action plan and conduct tests in their ATS surveillance system, in accordance with the airspace classification, as well as determine other automation requirements to satisfy future operational applications of the ATM community. An action plan was to be submitted to the ICAO NACC Regional Office by 26 February 2010, and no information was provided.

2.3.3.7 In this regard, the meeting considered important that the E/CAR States/Territories adopt the following actions:

- a) encourage CAR/SAM units in charge of sending reports to continue compliance requirements to report to CARSAMMA on a monthly basis;
- b) support regional and global activities that will promote accurate and timely reporting of errors within the CAR/SAM Regions; and
- c) conduct bilateral/multilateral meetings to assess and develop mitigations for reported errors.
- d) appoint an expert as point-of-contact to carry out work for the evolutionary interfacing of ATM automated systems;
- e) follow guidance material specified in the regional Interface Control Document (ICD) for data interfacing and common procedures to exchange messages between ATM automated systems to exchange ATS messages (EST, FPL, CPL, etc.);
- f) review the ATM automation capacities/functionalities of their corresponding Area Control Centres to meet future implementation requirements;
- g) conduct CPL tests between adjacent Area Control Centres, where benefits related to this implementation could result;
- h) establish bilateral or multilateral agreements as appropriate, among States/Territories of adjacent airspaces for trials and operational implementation/integration of ATM automated systems;
- i) establish necessary measures for human resources planning and training;

- j) identify other potential benefits for the ATM community that may be obtained in the long-term;
- k) conduct a cost-benefit analysis;
- l) document the action plan providing best experiences to other States/Territories; and
- m) Inform ICAO NACC Regional Office of progress with these actions no later than **28 February 2011**.

Missing and Duplicate Flight Plans in the E/CAR Region

2.3.3.8 In reference to E/CAR/WG Conclusion 31/4 *Urgent Actions to Mitigate Number of Missing Flight Plans in ATS Units of the Eastern Caribbean*, the Meeting was informed of the results of the internal investigation carried out by the local AIS Units in the month of November 2009. IP/10 provides all the records and details of the results of this investigation.

2.3.3.9 As a follow-up to this situation, the meeting agreed on the need to implement the suggested recommendations and carry out a second evaluation to identify improvements. In this regard the following Action plan for resolving Duplication and Missing flight plan in the E/CAR region was defined:

- a) the AIS committee will coordinate, circulate and advise states on the actions suggested to solve the missing/duplication of flight plans and to conduct trials and procedures for the elimination of duplicate and missing flight plans no later than 20 July 2010;
- b) E/CAR States are to carry out these trials are to take place during the period 1 to 30 September 2010; and
- c) the AIM Committee will collect and analyse the trials, compare these results with the previous November 2009 evaluation and identify the findings and any improvement detected. Submit the results to the ICAO NACC Regional Office by 20 October 2010 and to present them to the DCA's meeting in November 2010.

2.3.4 *Communications, Navigation and Surveillance (CNS)*

E/CAR AFS Network

2.3.4.1 The Meeting was informed on the creation of the Eastern Caribbean Network Technical Group (E/CAR/NTG) and the activities and results of its first Meeting, held in Trinidad and Tobago, from 6 to 7 April, 2010. The meeting recalled that the E/CAR/NTG main objectives are:

- a) analysis and monitoring of the status of the current E/CAR AFS Network;
- b) recommend measures to improve reliability of the E/CAR AFS Network for the immediate/near term; and
- c) study, analyze and follow-up on the planning, documentation and implementation of the replacement of the existing E/CAR AFS Network.

2.3.4.2 The Meeting reviewed and accepted the contributions of the E/CAR/NTG in support of the development of the E/CAR/WG work programme as proposed in the draft Conclusion E/CAR/NTG/1/1.

2.3.4.3 Regarding the current E/CAR AFS Network status, a review was carried out by the Meeting:

Anguilla:	Since the recovery of the Antigua Hub, the AFTN circuit has worked fine.
Antigua and Barbuda:	System has improved
Barbados:	Voice circuits have improved, but the AFTN circuit still presents frequent failures
Dominica:	Improvements have been implemented and problems are solved much faster.
Montserrat:	Since the improvement with the UPS system, the communications are better.
Saint Lucia:	Satisfactory operation of voice and data circuits
Saint Vincent and the Grenadines:	Data circuit operating well, voice circuit is intermittent
Sint Maarten:	The voice circuit is operating unsatisfactory
Trinidad and Tobago:	Satisfactory operation of the system
United States (San Juan):	Improvements have been perceived in the system

2.3.4.4 Based on the review and the results of the E/CAR/NTG, the meeting supported Conclusion 1/2 regarding the reclassification of GANDD deficiencies for the E/CAR AFS Network, and considered that these shall remain as priority “A” deficiencies but with the goal of solving them completely with the implementation of the MPLS Network. In this regard, the Meeting formulated the following draft conclusion:

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CONCLUSION 32/5

E/CAR AFS NETWORK DEFICIENCIES

Based on the improvements and immediate recovery actions made to the E/CAR AFS Network, the E/CAR States/Territories users of the E/CAR AFS Network concluded that the performance and operation of the network has improved and so urge:

- a) ICAO to change the priority of the existing related E/CAR AFS network Air Navigation deficiencies to priority “A,” and
- b) E/CAR States/Territories in coordination with the E/CAR/NTG evaluate further improvements with the implementation of the MPLS Network and the complete solution to the mentioned deficiencies, once the MPLS network has been in operation for 6 months.

2.3.4.5 Another aspect identified for improvement in the operation of the E/CAR AFS Network was the significant delays and general impedances of certain States/Territories clearing safety critical spares, that are necessary for the expeditious return to service of these systems and the ultimate reduction in down time, with their customs authorities.

2.3.4.6 Regarding the Replacement process for the E/CAR AFS Network, the Meeting was informed by the E/CAR/NTG that guidance is being sought from the Directors of the Eastern Caribbean on whether to proceed to issue the RFP as presented by Trinidad and Tobago and supplied to States and the E/CAR/NTG for consideration or to issue at this time a Request For Information (RFI). In this regard, the E/CAR/NTG formulated Draft Conclusion 1/3 to be approved by the E/CAR Directors of Civil Aviation.

2.3.4.7 The E/CAR/NTG recommends that a RFI be issued to industry and based on the information obtained from the RFI, States may be more informed to review and comment on the Draft RFP Technical Specifications proposed by Trinidad and Tobago. The Meeting agreed with the approach made by the E/CAR/NTG for having the most accurate and up-to-date requirements to continue the replacement process of the E/CAR AFS Network.

2.3.4.8 Trinidad and Tobago informed the Meeting that the development of a webpage for E/CAR AFS Network issues (failure reports, statistics, news, etc.) under the TTCAA website is a on-going process.

2.3.4.9 In attention to the E/CAR/WG Conclusions 31/5, 31/6 and 31/7, Trinidad and Tobago briefed the Meeting on their analysis of the E/CAR AFS network performance over the past ten months (July 2009 to May 2010), the recent updates to the network, fault reporting and feedback and the improvements/common network points of failure of the system. All the details are provided in WP/28 and its Appendix related to the site survey results.

2.3.4.10 In reference to E/CAR/WG Conclusion 31/7, Trinidad and Tobago informed the meeting that in the E/CAR/DCA/22 Meeting, in December 2009, the DCAs accepted the Telecommunications Services of Trinidad and Tobago (TSTT) proposal for a new E/CAR AFS network based on MPLS and IPLC circuits and CISCO routers (version 4.02), whose implementation will be completed by the end of 2010. WP/28 and its appendices provide all the details of this new network.

2.3.4.11 Under this analysis, it was noted that improperly maintained environmental conditions, as those discovered during the site surveys, were one of the contributing factors to the failures. Even though this aspect is being addressed within the E/CAR/NTG matters to be informed to the DCAs, and considering the implementation of the new E/CAR AFS Network, Trinidad and Tobago recommended a Memorandum of Understanding (MoU) between States and Trinidad and Tobago, covering electrical and environmental conditions that need to be provided and maintained for the AFS equipment, and including the corresponding failure responsibilities clauses. In this regard the meeting agreed to a MoU as requested by Trinidad and Tobago.

2.3.4.12 Regarding the fault reporting and feedback issues, Trinidad and Tobago proposed an improvement with an e-mail fault reporting system for those States that prefer this method. The procedure to fax the fault report to the Piarco AIS will also continue to be valid. The email addresses for the reporting are:

ais@caa.gov.tt	Accessed 24/7 by the Piarco AIS Supervisor who will contact the TTCAA Technician/Engineer.
telecoms.ttcaa@gmail.com	Accessed by the Telecommunications and Electronics Technicians/Engineers during regular working hours – Monday through Friday 8:00am to 4:15 pm, excluding weekends and public holidays.

2.3.4.13 The electronic version (editable format) of the fault report form (approved by the E/CAR/WG/29) that will be used for this improvement is available as Appendix B to WP/27 (<http://www.mexico.icao.int/Meetings/ECARWG32.html>). Regardless of the medium used to report a fault, the fault numbering system will be continuous. In this respect, the Meeting approved Trinidad and Tobago's proposal for this fault reporting and feedback improvement, by formulating the following Draft Conclusion:

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CONCLUSION 32/6

E/CAR AFS NETWORK FAULT REPORTING SYSTEM BY E-MAIL

As an improvement to the fault reporting and feedback issues of the E/CAR AFS Network, the E/CAR AFS Network users, may apply the email fault reporting system proposed by Trinidad and Tobago, and so use the corresponding email addresses and form¹ described for this system.

2.3.4.14 Sint Maarten (Netherlands Antilles) informed the meeting on their plans to use, in 2010, their voice switch and implement several voice and data circuits between Sint Maarten and Saint Barthélemy, Grand Case, Anguilla, Sint Eustatius and Saba as illustrated in the diagram given in **Appendix E**. Considering the MPLS network as a midterm solution for communications in the E/CAR Region, Sint Maarten informed:

- Sint Maarten will remain connected to the E/CAR system via Antigua (voice circuit)
- Sint Maarten, Trinidad and Tobago and United States will investigate the possible voice inter-connectivity of Sint Maarten to Trinidad and Tobago network via San Juan
- The Saint Barthélemy and Grand Case voice/data connectivity into the Sint Maarten switch proceeds as planned and hopefully will be operational by the end of 2010
- The Anguilla data circuit remains within the E/CAR data network, while the voice circuits are being worked out in similar fashion as Saint Barthélemy & Grand Case.
- Sint Maarten will proceed with dedicated voice and radar lines via MEVA with SJU while the radar data sharing introduction is worked on.

¹ Electronic form available for download at <http://www.mexico.icao.int/Meetings/ECARWG32.html>

FAA Packet Switching Network

2.3.4.15 Under WP/20, the United States presented its plans to decommission its domestic NADIN PSN (X.25) data network, their continued support for X.25 international AFTN links and the Automated Message Handling System (AMHS) message traffic, and how this access will be concentrated at the KATL (Atlanta, GA) and KSLC (Salt Lake City, UT) centers. Existing international connections will be rerouted and new connections for both X.25 and IP message transports are requested to be directed to these centers. For efficient rerouting of MEVA II satellite data connections, the FAA plans to commission a new MEVA II ground station in Atlanta, Georgia, to be collocated with the KATL center. MEVA II AFTN connections currently landed at Miami will be reconfigured to land at the new Atlanta ground station. Affected States require no changes. AFTN and X.25 link configuration parameters will remain the same. Existing MEVA satellite voice connection routing will be unaffected.

2.3.4.16 In this regard, States were recommended to take the corresponding actions to route future AFTN and AMHS connections to KATL or KSLC.

AMHS Workshop for the CAR Region

2.3.4.17 The United States informed the meeting on their plan to carry out a workshop in Miami in **October 2010**, aimed to exchange AMHS information among the States/Territories/International Organizations and support the implementation of the AMHS in the CAR Region with the main objective to define a CAR Regional implementation plan for the AMHS and the corresponding trial activities. The FAA will coordinate the workshop with the ICAO NACC Regional Office.

States/Territories' Support to the ICAO Position for the ITU Radio Communication Conference 2012 (WRC-2012)

2.3.4.18 Aimed to guide the States' support to the ICAO position for the ITU Radio Communication Conference 2012 (WRC-2012), the Meeting was informed on the results of the ICAO NAM/CAR/SAM Regional Preparatory Meeting (NCSRPM) for ITU WRC-2012, emphasizing the following recommendations:

- States, that have not yet designated their WRC-2012 PoC, should urgently notify the designation to ICAO;
- to support the ICAO Position for WRC-2012, PoCs should coordinate with their National Radiofrequency Spectrum Management Authority;
- States should review the existing COM lists available on the ICAO NACC Regional Office Website to confirm the use of the frequencies assigned; and
- if not yet implemented, States should formalize a mechanism or procedure with their National Radiofrequency Spectrum Management Authority for the detection and resolution of unauthorized transmissions causing interference to aeronautical services.

2.3.4.19 The NCSRPM Meeting concluded that the support of the ICAO Position for WRC-2012 can only be achieved through a national and regional effort with the active participation of the civil aviation administrations in coordination with their National Radiofrequency Spectrum Management Authorities. **Appendix F** to this part of the report shows the revised PoC listings for the WRC-2012.

Updates to CNS SARPs and future work of the CNS ICAO Panels

2.3.4.20 The Meeting was informed (IP/02) of amendments, 84, 85 and 86 to Annex 10, of the updates to the CAR/SAM ANP CNS Tables, the current and future work of the ICAO Aeronautical Communications Panel (ACP), Navigation System Panel (NSP) and Aeronautical Surveillance Panel (ASP), and other related CNS documentation.

2.3.5 *Aeronautical Meteorology (MET)*

2.3.5.1 The Meeting took note that the ISCS-WAFS satellite service will be operational until 30 June 2012. The Civil Aviation and Meteorological Authorities of E/CAR States and Territories are invited to make timely arrangements to implement the following facilities at their meteorological offices:

- a) a WAFS Internet File Server (WIFS) station to receive OPMET data and WAFS products; and
- b) a NOAANET station to disseminate OPMET data and other meteorological data.

2.3.5.2 Regarding the requirements for AFTN terminals at the premises of the meteorological offices, for Antigua and Barbuda, Barbados, and Trinidad and Tobago pointed out that with the new MPLS network and the installation of this new equipment, the current limitation in this issue will be solved. Related to the request from States for the MET services to avail of an AFTN terminal, the meeting noted that the design of the new E/CAR AFS network would easily accommodate an expansion in the number of workstations. Trinidad and Tobago informed that the hardware would be the responsibility of States to provide and that Trinidad and Tobago would supply the software.

2.3.5.3 Furthermore, the Meeting asked the Secretariat that the Civil Aviation and Meteorological Authorities of the E/CAR Region should be reminded of the need to ensure that MET personnel of the States be invited to Regional Meetings.

2.3.5.4 Finally the Meeting was invited to take the following actions to:

- a) enhance coordination between MET-COM services to ensure continuous OPMET data dissemination and exchange;
- b) enhance coordination between MET-ATS services to improve availability of special air reports (SIGMET messages);
- c) implement Quality Management Systems for aviation meteorological services and inform the ICAO NACC Regional Office about these plans before 30 November 2010; and
- d) prepare the meteorological component of their national performance-based air navigation implementation plan before **30 December 2010**, in compliance with GREPECAS conclusion 15/1, item b) and the NAM/CAR RPBANIP.

2.3.5.5 The Meeting took note that as a WAFS provider State, the United States provides aviation weather forecast data in accordance with ICAO Annex 3 via the ISCS to WAFS work stations around the world. There is also a need to add an Internet communications capability. In this regard, the United States informed of its FTP server proposal to access OPMET and World Area Forecast System Products via the Public Internet. This new program is referred to as the WAFS Internet File Service or WIFS.

2.3.5.6 The United States informed that this same proposal was presented at the Tenth Meeting of the GREPECAS Aeronautical Meteorology Subgroup (AERMETSG/10), which established a Task Force for WAFS Internet File Service (WIFS) transition.

2.3.5.7 WIFS is to be provided by the National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS). The WIFS will have access to all WAFS products from the National Weather Service Telecommunication Gateway that supports the ISCS. The Meeting was highlighted how the File Server will operate and the status of WIFS development.

2.3.5.8 WP/21 provides an overview of the WIFS service. In addition it was informed that the current International Satellite Communication System 2nd Generation (ISCS-G2) contract will expire by 30 June 2010, but the FAA has extended the contract until 30 June 2012.

2.3.5.9 The United States informed the Meeting that it is studying the possibility that the WIFS system can operate for data reception and for data transmission, and is coordinating with NOAA to determine this capacity. In addition it was indicated that the NWS has set up a website (<http://aviationweather.gov/wifs/>) in support of WIFS. It was also clarified that the File Server has been operational from the first quarter of 2010 providing an improved capability over FTP.

2.3.5.10 The meeting was informed that the related WIFS implementation documents to support the transition such as Interface Control Document, Check List, and User Guidelines can be found at the mentioned NWS Website.

2.4 Human Resources Strategy and Training for the Next Generation of Aviation Professionals (NGAP)

2.4.1 Under WP/14, the Meeting recalled NACC/DCA Meeting Conclusions 3/11 – *Human Resource Planning and Training in the NAM/CAR Regions* and 3/12 – *Aeronautical Training Strategy for the CAR Region*, and took note that under the USOAP results, many deficiencies are related to a lack of qualified and experienced personnel, suitable training, license/certification system, and oversight activities.

2.4.2 The meeting was also informed on the ICAO Next Generation of Aviation Professionals (NGAP) matters, emphasizing the following:

- in future years, the demand for aviation professionals will exceed the supply;
- training capacity will be insufficient to meet the demand; and learning methodologies will not match the learning styles of the next generation;

- wholesale retirements in the current generation of aviation professionals, accessibility to affordable training, competition with other industry sectors for skilled employees, a lack of harmonization of competencies in some aviation disciplines, and a lack of awareness by the “next generation” of the types of aviation jobs available; and
- regulators, members of industry, trainers and education providers, clearly need to coordinate the human resource data collection process.

2.4.3 The meeting was informed of the NGAP initiatives, the creation of the NGAP Task Force and the results of the NGAP Symposium. The High-level Safety Conference (HLSC), held in Montreal in March 2010, recommended that States and International Organizations support the work of the NGAP Task Force.

2.4.4 The meeting also took note of the future work and deliverables of the NGAP Task Force and the GREPECAS CNS/ATM/SG/1 developments in human resources with the list of short and mid-term training requirements to be used as a reference for CAR/SAM States guidance on the development of their aeronautical training programmes (Appendix D to Agenda Item 6 of CNS/ATM/SG/1 Report); and the draft guidelines for the preparation of a GNSS training programme based on GBAS and SBAS (Appendix E to Agenda Item 6 of CNS/ATM/SG/1 Report).

2.4.5 Considering all the above, the Meeting agreed to formulate the following draft conclusion:

DRAFT

CONCLUSION 32/7

CAR REGIONAL AVIATION TRAINING PLAN

That, in order to plan for the provision of aviation training required for 2012 – 2016 in the CAR Region:

- a) E/CAR States/Territories review and consider the recommendations of the Next generation of Aviation Professionals (NGAP) Symposium;
- b) ICAO send a letter to States/Territories by 31 July 2010 requesting information on future aviation training required by its personnel and provided by recognised institutions offering aviation training in its State/Territory, for replies to be received by ICAO by **30 September 2010**;
- c) ICAO send a letter to International Organizations by 31 July 2010 requesting information on aviation training required by its members’ personnel and aviation training provided in the CAR Region by its Organization and/or members, for replies to be received by ICAO by **30 September 2010**;

- d) ICAO:
 - i) analyse the information provided by States/Territories/International Organizations;
 - ii) prepare a report on regional aviation training needs in States/Territories for 2012 - 2016;
 - iii) prepare a directory of existing aviation training providers in the region recognised by States/Territories/International Organizations;
 - iv) identify the future aviation training required for which there are presently no suitable providers in the Region;
 - v) recommend options for the development and provision of the additional future training required;
 - vi) prepare a regional plan for aviation training provision for 2012 – 2016; and
 - vii) circulate these documents to States/Territories/International Organizations by **30 November 2010** for review and comments, for replies to be received by ICAO by **31 January 2011**;
- e) ICAO prepare and present the draft regional training plan for the CAR Region for 2012 – 2016 to the NACC/WG/3 Meeting to be held in Guatemala in April 2011; and
- f) ICAO revise and present the final regional training plan for the CAR Region for 2012 – 2016 to the NACC/DCA/4 Meeting to be held in June 2011.

NAM/CAR RPBANIP PROGRESS

Regional Performance Objectives (RPO)	ACHIEVEMENTS BY FIR							
	PIARCO					SAN JUAN		
	ECCAA (Antigua* and Barbuda, Dominica, Grenada* Saint Kitts and Nevis, Saint Lucia, Saint Vincent* and the Grenadines)	Barbados*	Trinidad and Tobago	France (Guadeloupe* and Martinique*)	UK (Montserrat)	Netherlands Antilles (Saint Maarten)	UK (Anguilla, British Virgin Islands - BVI)	USA (Puerto Rico and Virgin Islands)
PBN Implementation - RPOs 1, 2, 3	1) RNAV procedures published for Canouan Airport since 15Jan09. 2) RNAV procedures for the R.L. Bradshaw airport in St. Kitts and V.W. Amory Airport in Nevis flight-inspected in first week of Feb 2010 – following clarification of issues unrelated to the procedures themselves, implementation expected before September 2010. 3) RNAV procedures for Hewanorra and GFL Charles Airports airports in St. Lucia, and Melville Hall Airport in Dominica flight-inspected in first week of June 2010 – implementation expected before September 2010. Saint Lucia: RNAV approaches/procedures for Hewanorra and GFL Charles airports were flight inspected first week of June 2010. Implementation expected September 2010.		RNAV procedures Implemented for Piarco and Crown Point Airports on 2004, August 05.				Anguilla: New RNAV Procedures to be designed and published	RNAV/RNP Routes Implemented in the en route environment with WATRS Plus Project. RNAV approaches also implemented. POC: Barbara Cassidy
Civil Military Coordination - RPO 4	N/A		Not/Applicable. There is neither Permanent Military Airspace of significance within the Piarco FIR nor the Sovereign airspace of Trinidad and Tobago.				Anguilla: Not Applicable	Excellent civil-military coordination with information exchange. At San Juan, dynamic sectorization facilitates the use of FUA.

Regional Performance Objectives (RPO)	ACHIEVEMENTS BY FIR							
	PIARCO					SAN JUAN		
	ECCAA (Antigua* and Barbuda, Dominica, Grenada* Saint Kitts and Nevis, Saint Lucia, Saint Vincent* and the Grenadines)	Barbados*	Trinidad and Tobago	France (Guadeloupe* and Martinique*)	UK (Montserrat)	Netherlands Antilles (Saint Maarten)	UK (Anguilla, British Virgin Islands - BVI)	USA (Puerto Rico and Virgin Islands)
Upper Airspace A Classification – RPO 5	Completed	Completed	Completed.	Completed	Completed	Completed	Anguilla: Not Applicable	Implemented.
Demand and capacity balance (ATFM) – RPO 6	Saint Lucia: PoC Errol Cherubin		Work is being done on a Draft ATFM Manual and an ATFM Implementation for the Piarco FIR is being developed.				Anguilla: Operational Letter of Agreement with Juliana.ATC Effective 15 th September 2007	ATFM Implemented. Work in progress to expand collaboration with ATS units of adjacent States.
ATM Improvement of Situational Awareness – RPO 7	Radar Data Sharing Saint Lucia: RADAR data sharing with French Antillies-Monitoring only		New Automated system Project being implemented – Piarco ATM Modernization Plan.	Radar Data Sharing with Saint Lucia and Barbados		Radar System operating. Radar Sharing with San Juan in progress.	Anguilla: Proposed AFTN networking with Juliana Stage 1. Stage 11 Radar Display only for the future.	Radar data sharing with St. Maarten in progress. U.S. has ATS Inter-facility Data Communication (AIDC) agreements with Canada and Mexico and is in discussions with Cuba. U.S. is interested in similar collaboration with E/CAR States.
Implementation of the new ICAO Flight Plan Format – RPO 8	PoC: Anthony Meade, ECCAA	PoC:	Piarco AFTN Switch is being upgraded to AMHS. This Project is scheduled to be completed by 3rd Quarter 2011. This new system will accomplish the operational requirements.	PoC:	PoC:	PoC:	Anguilla: Will work with required agencies to ensure compliance by expected date.	Plans for implementation in progress. POC: Diane Bodenhamer
Improvement of SAR service – RPO 9	Saint Lucia: PoC Peter Jean (Dir of Airports)		Refer to E/CAR/DCA Conclusion 22/2, E/CAR/WG/32 SAR Committee Report and Draft Report of E/CAR/WG/32 – Page 2-4 Para. 2.1.18.				Anguilla: Letter of Agreement with Puerto Rico Coast Guard Service for the provision of SAR under discussion	U.S. Coast Guard responsible for SAR. Two stations are located in Puerto Rico.

Regional Performance Objectives (RPO)	ACHIEVEMENTS BY FIR							
	PIARCO					SAN JUAN		
	ECCAA (Antigua* and Barbuda, Dominica, Grenada* Saint Kitts and Nevis, Saint Lucia, Saint Vincent* and the Grenadines)	Barbados*	Trinidad and Tobago	France (Guadeloupe* and Martinique*)	UK (Montserrat)	Netherlands Antilles (Saint Maarten)	UK (Anguilla, British Virgin Islands - BVI)	USA (Puerto Rico and Virgin Islands)
Enhance capacity and efficiency of aerodrome operations RPO - 10 Implementation of aerodrome certification	ADM legislation currently being drafted for all OECS States. Grenada had reported to 31ECWG that they were in process of complying with requirements for aerodrome certification Saint Lucia: Legislation is currently being drafted. PoC Peter Jean		Both Piarco and Crown Point Airports were certified in 2009 May and recertified in 2010 May.				Anguilla: Adherence to Annex and OTAR Publications and to any open Regulatory Non-conformity Reports- RNR's	Puerto Rico – 4/4 aerodromes certified. U.S. Virgin Islands – 2/2 aerodromes certified.
Enhance capacity and efficiency of aerodrome operations RPO - 10 Implementation of action plans for runway incursion prevention	Saint Lucia: Training of Airside users in safety practices, implementation of two way coms. Between ATC and Airside users, installation of Taxiway/Runway guidance signs, Airport Authority continuing to promote and enhance safety practices		All Tower Air Traffic controllers have been exposed to Runway Incursions Prevention Briefings during Refreshers. The Airports Operation Agency – Airports Authority of Trinidad and Tobago have been working on improving Airfield Marking and the implementation of Stop-Bars, etc. plus briefing of personnel operating on the Movement Area.				Anguilla: Introduction shortly of Safety Management System procedures	The U.S. has established the Office of Runway Safety, responsible for improving runway safety by decreasing the number of surface incidents and runway incursions.

Regional Performance Objectives (RPO)	ACHIEVEMENTS BY FIR							
	PIARCO					SAN JUAN		
	ECCAA (Antigua* and Barbuda, Dominica, Grenada* Saint Kitts and Nevis, Saint Lucia, Saint Vincent* and the Grenadines)	Barbados*	Trinidad and Tobago	France (Guadeloupe* and Martinique*)	UK (Montserrat)	Netherlands Antilles (Saint Maarten)	UK (Anguilla, British Virgin Islands - BVI)	USA (Puerto Rico and Virgin Islands)
Enhance capacity and efficiency of aerodrome operations RPO - 10 Implementation of aerodrome capacity analysis, enhancement and planning procedures (ACE)	Saint Lucia: PoC Peter Jean		The TTCAA is at the initial research stage. Data is being collected for analysis by the CAA.				Anguilla: Aerodrome Certification due by year end. Live Emergency Exercise. Planning to commence shortly	Have initiated ACRP research studies to validate safety risk models of airport capacity under reduced weather conditions. Aircraft operations and weather data contained in the various databases within the FAA's Aviation System Performance Metrics (ASPM) program are currently under analysis.
Protection and optimum use of radiofrequency spectrum RPO - 11	NCSRPM meeting carried out in April 2010 Freq. Interference Procedure in place Saint Lucia: NCSRPM meeting carried out in April 2010. Frequency interference procedure in place.	NCSRPM meeting carried out in April 2010	NCSRPM meeting carried out in April 2010. Additionally, the TTCAA has written the Telecommunication s Authority of Trinidad and Tobago lending our support for the ICAO Position. The ICAO position is being supported by Trinidad and Tobago.	NCSRPM meeting carried out in April 2010	NCSRPM meeting carried out in April 2010	NCSRPM meeting carried out in April 2010	Anguilla: The State Telecommunication s Officer ensures that the band for aeronautical users is not infringed upon.	NCSRPM meeting carried out in April 2010. The FAA has a dedicated office for the management of ATC Spectrum Assignment and Engineering.
Optimization and modernization of communications infrastructure RPO – 12 / see CNS expected results	See CNS Comm Report	See CNS Comm Report	See CNS COMM Report ref: the New AFS Network and new and additional air/ground Frequencies for the Piarco FIR.	See CNS Comm Report	See CNS Comm Report	See CNS Comm Report	Anguilla: In discussion with Juliana ATS with an intended link with the MEVA 11 Network	See CNS Comm. Report U.S. Air to Ground communication infrastructure is currently being updated. U.S. has plans for ATN/AMHS implementation for ground to ground.

Regional Performance Objectives (RPO)	ACHIEVEMENTS BY FIR							
	PIARCO					SAN JUAN		
	ECCAA (Antigua* and Barbuda, Dominica, Grenada* Saint Kitts and Nevis, Saint Lucia, Saint Vincent* and the Grenadines)	Barbados*	Trinidad and Tobago	France (Guadeloupe* and Martinique*)	UK (Montserrat)	Netherlands Antilles (Saint Maarten)	UK (Anguilla, British Virgin Islands - BVI)	USA (Puerto Rico and Virgin Islands)
Implementation of WGS – 84 and e-TOD - RPO 13	With the exception of the very few coordinates that are indicated in the E/CAR AIP, WGS-84 is the datum for all coordinates published for the OECS States. Updated WGS-84 ADM and obstacle charts published for the airports in St. Kitts and Grenada, while those for Melville Hall airport in Dominica expected to be published before 30Sep10. Saint Lucia: The datum for all coordinates published in the ECAR AIP for Saint Lucia is in WGS 84		WGS-84 implementation was completed in the State of Trinidad and Tobago and in airspaces for which it has jurisdiction, since 2002. Discussions are continuing with the States Map and Chart Agency – Lands and Surveys Department of the Ministry of Agriculture, land and Marine Resources to obtained verified data.				Anguilla: WGS-84 survey completed in June 2009. Full data and co-ordinates in AIP for Wallblake Airport	Implemented. Note the U.S. conducts civil aeronautical horizontal surveys to the North American Datum 1983 (NAD83), operationally equivalent to WGS 84. Nautical vertical surveys are conducted to the North American Vertical Datum 1988 (NAVD 88).
Implementation of transition to AIM RPO - 14	Saint Lucia: PoC Anthony Meade (ECCAA)		There is a Draft Implementation Plan for transitioning AIS to AIM.				Anguilla: Trinidad publishes our AIP IN Hard Copy and Compact Disc. Awaiting transition to electronic AIP.	The U.S. supports the needs for digital data and a common data exchange format. The U.S. is a member of the ICAO AIS-AIM Study Group and rapporteur of ICAO's AIS-AIM Study Group Ad-hoc committee.

Regional Performance Objectives (RPO)	ACHIEVEMENTS BY FIR							
	PIARCO					SAN JUAN		
	ECCAA (Antigua* and Barbuda, Dominica, Grenada* Saint Kitts and Nevis, Saint Lucia, Saint Vincent* and the Grenadines)	Barbados*	Trinidad and Tobago	France (Guadeloupe* and Martinique*)	UK (Montserrat)	Netherlands Antilles (Saint Maarten)	UK (Anguilla, British Virgin Islands - BVI)	USA (Puerto Rico and Virgin Islands)
Enhance available meteorological information RPO – 15 / see MET expected results	Antigua & Barbuda: AFTN Terminal for MET Office in progress Saint Lucia: Complete	AFTN Terminal for MET Office in progress	Piarco ATS has connectivity with the Trinidad and Tobago MET Services for transfer of MET Data/ information. With the implementation of the new AFS Network connectivity will be available to all E/CAR States. States will be responsible for all hardware; Trinidad and Tobago will provide only software and connectivity. Additionally, there is a LOA between the MET Services of Trinidad and Tobago and the ATS of the TTCAA for exchange of AEROMET data.				Anguilla: Will require technical assistance is this area.	Meteorological information is obtained from Primary Surveillance and Next Generation Weather (NEXRAD) radars. All major airports have ATIS installed.

NAM/CAR RPBANIP Metrics

Metrics	BENEFITS BY FIR							
	PIARCO					SAN JUAN		
	ECCAA (Antigua* and Barbuda, Dominica, Grenada* Saint Kitts and Nevis, Saint Lucia, Saint Vincent* and the Grenadines)	Barbados*	Trinidad and Tobago	France (Guadeloupe* and Martinique*)	UK (Montserrat)	Netherlands Antilles (Sint Maarten)	UK (Anguilla, British Virgin Islands - BVI)	USA (Puerto Rico and Virgin Islands)
Key Performance Area: Efficiency:								
- Estimated fuel savings (year 2000 as baseline); - Percent of flights departing on-time; - Percentage of instrument runway ends with an approach procedure with vertical guidance (APV), (BARO-VNAV and/or augmented GNSS) either as the primary approach or as a back-up for precision approaches; - PBN Routes implemented and published in en-route; - Number of certified aircrafts and pilots for PBN operations for en-route and TMA; - Percent of flights with normal flight duration; - Traffic movements i.e. # of movements; - Unused capacity i.e. # of movements; - Number of ATC automated systems that are interconnected; - Number of terminal areas with SID/STAR implemented.	Saint Lucia: NA	RNAV: 2 SIDs, 2 APPs (RNP) = 4	RNAV GNSS: 4 APPs (RNP) = 4	RNAV GNSS: 4 STARs, 2 APPs (RNP) = 6		RNAV GNSS: 1 SIDs, 3 STARs, 1 APP (RNP) = 5		RNAV (GPS): 8 SIDs, 10 STARs, 10 APPs (RNP) = 28

Metrics	BENEFITS BY FIR							
	PIARCO					SAN JUAN		
	ECCAA (Antigua* and Barbuda, Dominica, Grenada* Saint Kitts and Nevis, Saint Lucia, Saint Vincent* and the Grenadines)	Barbados*	Trinidad and Tobago	France (Guadeloupe* and Martinique*)	UK (Montserrat)	Netherlands Antilles (Sint Maarten)	UK (Anguilla, British Virgin Islands - BVI)	USA (Puerto Rico and Virgin Islands)
Key Performance Area: Cost- effectiveness								
• Total operating cost plus cost of capital divided by IFR flights; • Average cost per flight at a system wide annual level; • Investment cost; • Cost per retrofit; • Out of service cost; • Operating and Maintenance cost.	Saint Lucia: NA							
Key Performance Area: Safety								
• Number of runway incursions per year; • Number of operational errors per year; • Number of accidents per 100,000 departures; • Number of fatalities per 100,000 departures; • Number of LHD reports.	Saint Lucia: NA							

APPENDIX C

Runway excursion (REs)

ICAO's runway safety efforts currently underway in regard to RE mainly include:

- a) provisions for runway end safety areas (RESA) and associated mitigating measures;
- b) provisions for runway friction measurement and surface condition assessment and reporting, and development of a circular providing runway friction-related information and guidance;
- c) development of the performance-based navigation (PBN) concept to provide for better stabilized approaches;
- d) provisions for standardized visual aids providing consistent situational awareness for flight crews; and
- e) development of a joint ICAO/IATA Runway Excursion Risk Reduction Toolkit providing a multi-disciplinary perspective.

Runway incursion (RIs)

ICAO's runway safety efforts currently underway in regard to RI mainly include:

- a) SARPs and guidance material for the integrated use of visual aids to help prevent RI;
- b) provisions for the use of aerodrome ground radar systems and standardized controller-pilot-driver communications;
- c) standardization of RI terminology and improvements in the collection of RI data; and
- d) human factors considerations of clearance compliance.

Other Occurrences and Activities related to Runway Safety

ICAO's runway safety efforts currently underway in regard to other occurrences and activities mainly related to runway safety include:

- a) provisions concerning the regular inspection, monitoring and maintenance of movement areas, including runways, so that runway pavements are kept clear of foreign object debris (FOD);
- b) expansion of bird strike hazard reduction provisions to include all wildlife; and
- c) provisions concerning the use of the new performance level "C" foam for aircraft rescue and fire fighting.

APPENDIX D

CATALOGUE OF ATS CONTINGENCY PLANS OF THE NAM/CAR STATES, TERRITORIES AND INTERNATIONAL ORGANISATIONS THAT PROVIDE ATS WITHIN THE FIRS OF THE NAM AND CAR REGIONS

FIR	Estado adyacente / Adjacent State	Estado / Status		Punto de Contacto / Point of Contact	Descripción general de facilidades y servicios que garantizan la continuidad / General description of facilities and services available which ensure continuity	Observaciones / Remarks
		Borrador Draft	Final			
1	2	3	4	5	6	7
Havana (Cuba)	Estados Unidos United States		X	Instituto de Aviación Civil de Cuba (IACC) Fidel Ara Tel: +537 8381121 / 8381146 Fax: +537 834 4571 ACC Tel: +537 6497281 / 6497284 Fax: +537 6495029 6421185 fidel.ara@iacc.avianet.cu	Procedimientos de Contingencia para garantizar la prestación de los ATS /Contingency procedures to ensure provision of ATS.	
	Haiti		X			
	Jamaica		X			
	México		X			
	COCESNA		X			
Canada	Estados Unidos United States					
	Islandia Iceland					
	Federación Rusa Russian Federation					
Curacao Curacao ACC (Por/for Aruba)	Colombia	X		Netherlands Antilles Air Traffic Control (NAATC) Micilia Albertus-Verboom Erich Menig Tel.: (599-9) 8393-505/-506 Fax: (599-9) 8683-012 E.Menig@naatc.an M.Albertus-Verboom@naatc.an	Plan de Contingencia para garantizar la prestación de los ATS /Contingency Plan to ensure provision of ATS	Se requiere coordinación bilateral adicional / Requires bilateral additional coordination
	Estados Unidos United States	X				
	Jamaica	X				
	Haiti	X				
	Rep. Dominicana/ Dominican Rep.	X				
	Venezuela					

FIR	Estado adyacente / Adjacent Sate	Estado / Status		Punto de Contacto / Point of Contact	Descripción general de facilidades y servicios que garantizan la continuidad / General description of facilities and services available which ensure continuity	Observaciones / Remarks
		Borrador Draft	Final			
1	2	3	4	5	6	7
Estados Unidos United States	Cuba		X	ATCSCC (NOM and NOCC / National Operations Manager And National Operations Control Center) Tel: +1703 904-4525 Fax: +1703 904-4459 Tel: +1703 904-4487 (NOCC)	Emisión flexible mediante NOTAMS. /Avisos a todas las partes involucradas; infraestructura de apoyo para garantizar la prestación de ANS. Flexible emission through NOTAMS /Advisories to all parties concerned; back up infrastructure to ensure provision of ANS.	
	México		X			
	Haití		X			
	Rep. Dominicana/ Dominican Rep.		X			
	Trinidad & Tobago		X			
	Curazao		X			
	Venezuela		X			
Port au Prince	Cuba		X	Office National de l'Aviation Civile (OFNAC)	Plan de Contingencia para garantizar la prestación de los ATS /Contingency Plan to ensure provision of ATS	Approved by the President of the Council Aprobado por el Presidente del Consejo
	Estados Unidos United States		X	Jean Pierre Lemerque Tel: (509) 250-0046		
	Jamaica		X	/0420/0052/0647/0046		
	Curazao		X	Fax: (509) 250-0998 / 0175		
	Rep. Dominicana/ Dominican Rep.		X	lpierre@ofnac.org		
Kingston Kingston ACC (Por/for Cayman Island)	Curazao	X		Jamaican CAA - Air Navigation Services Division Noel Ellis Carl Gaynair Donald Shaw Tel: (1-876) 960 – 4033 Fax: (1-876) 960 - 4033 dans@jcaa.gov.jm mats@jcaa.gov.jm centerchief@jcaa.gov.jm	Plan de Contingencia para garantizar la prestación de los ATS /Contingency Plan to ensure provision of ATS	Se requiere coordinación bilateral adicional / Requires bilateral additional coordination
	Colombia	X				
	Panamá	X				
	Haití	X				
	COCESNA	X				

FIR	Estado adyacente / Adjacent Sate	Estado / Status		Punto de Contacto / Point of Contac	Descripción general de facilidades y servicios que garantizan la continuidad / General description of facilities and services available which ensure continuity	Observaciones / Remarks
		Borrador Draft	Final			
1	2	3	4	5	6	7
Mexico & Mazatlan Oceanic	Cuba		X	SENEAM (Servicios a la Navegación en el Espacio Aéreo Mexicano) Tel: (55) 5726-1505; (55) 5786-5515. Fax: (55) 5786-0774	Procedimientos de Contingencia para garantizar la prestación de los ATS /Contingency procedures to ensure provision of ATS	
	Estados Unidos United States		X			
	COCESNA		X			
Santo Domingo (Republica Dominicana)	Curazao		X	Instituto Dominicano de Aviación Civil Julio Mejia +1809-221-7909 ext 301 +1809-549-1310 ext 223 +1809-796-1586 jestrada@idac.gov.do jmejia@idac.gov.do	Plan de Contingencia para garantizar la prestación de los ATS /Contingency Plan to ensure provision of ATS	
	Haití		X			
	Estados Unidos United States		X			
Piarco (Trinidad & Tobago ANS) (Por/for Barbados) Antigua & Barbuda, France, St. Lucia)	Estados Unidos United States		X	TTCAA - Air Navigation Services Division Trevor Dowrich Samuel Lampkin Tel: (1-868) 669 - 4302 Fax: (1-868) 669 – 5397 tdowrich@caa.gov.tt tdowrich@tsst.net.tt samlampk@tsst.net.tt slampkin@caa.gov.tt	Plan de Contingencia para garantizar la prestación de los ATS /Contingency Plan to ensure provision of ATS	Se requiere coordinación bilateral adicional / Requires bilateral additional coordination
	Guyana		X			
	Guyana Francesa French Guiana		X			
	Venezuela		X			
	Suriname		X			
	Curazao		X			
	Dakar		X			
	Portugal		X			

FIR	Estado adyacente / Adjacent Sate	Estado / Status		Punto de Contacto / Point of Contact	Descripción general de facilidades y servicios que garantizan la continuidad / General description of facilities and services available which ensure continuity	Observaciones / Remarks
		Borrador Draft	Final			
1	2	3	4	5	6	7
Central America/ Centro America CENAMER ACC (Por/for Belice, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua)	Colombia		X	CENAMER ACC/FIC APARTADO POSTAL 660 AEROPUERTO INTERNACIONAL TEGUCIGALPA, HONDURAS TELEFAX: (5049) 234 2507 PBX (504) 234 3360 CENAMER ACC/FIC	Procedimientos de Contingencia para garantizar la prestación de los ATS; infraestructura de apoyo para garantizar la prestación ATS /Contingency procedures to ensure ATS provision; back up infrastructure for provision of ANS	
	Cuba		X			
	Jamaica		X			
	México		X			
	Panamá		X			
	Ecuador		X			

Note /Nota:

Columna 1: Indicar Estado, Territorio u Organismo Internacional / Indicate State, Territory or International Organization

Columna 2: Indicar Estado, Territorio u Organismo Internacional con quien debe coordinarse el Plan de Contingencia del Estado citado en la Columna 1/ Indicate State, Territory or International Organization with whom the contingency plan of the State mentioned in column 1 should be coordinated.

Columna 3: Marcar con X en el caso que el Plan de contingencia se encuentre en proceso para su armonización con el Estado en cuestión / Mark with an X in case the contingency plan is in process for its harmonization with the referred State.

Columna 4: Marcar con X en el caso que el Plan de contingencia se encuentre armonizado con el Estado en cuestión / Mark with an X in case the contingency plan is in process for its harmonization with the referred State.

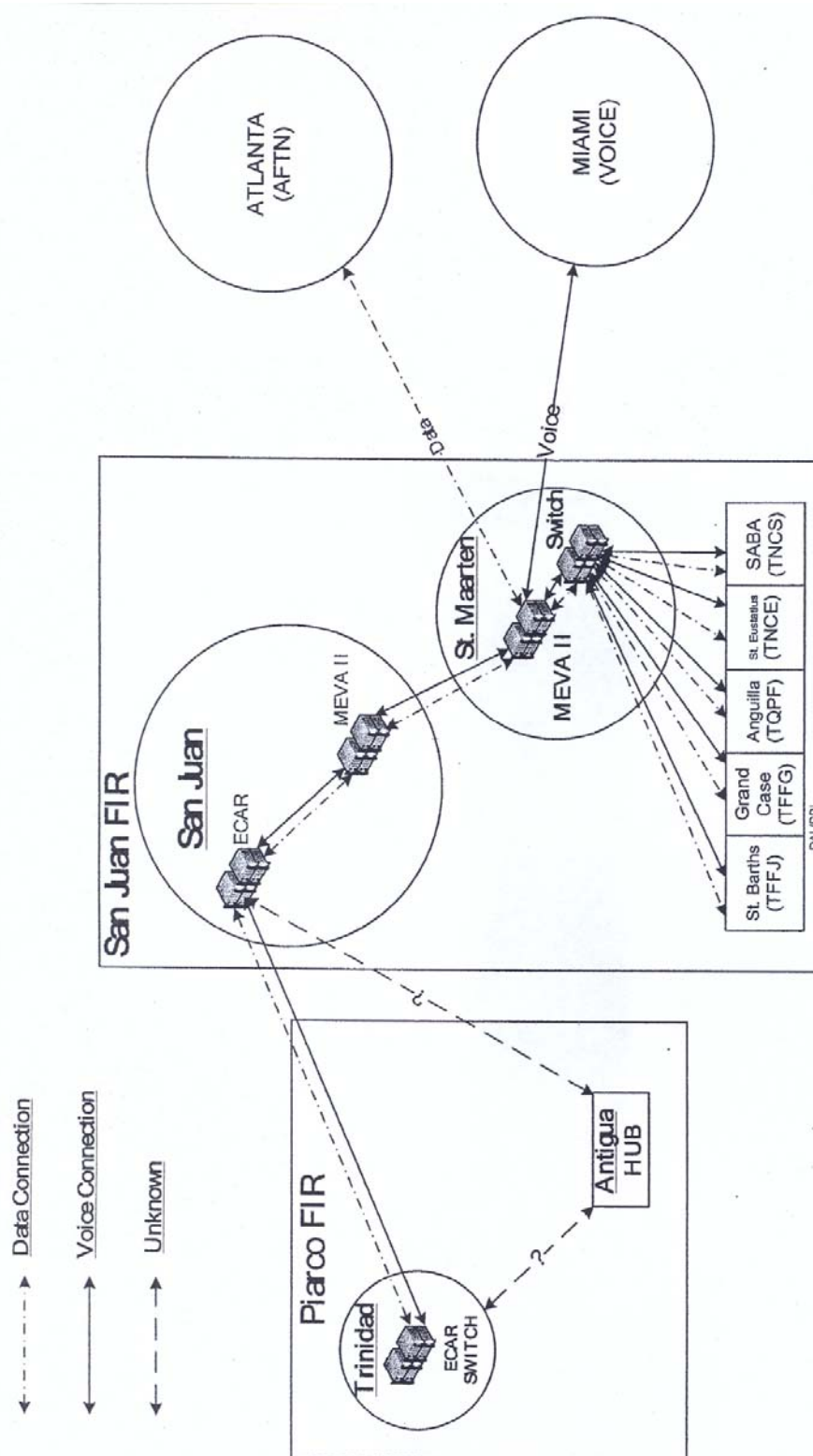
Columna 5: Indicar Cargo del Punto de Contacto y medio de comunicación a utilizar en caso de ser necesario / Indicate position of the point of contact and communications means to be used, if necessary.

Columna 6: Indicar cuáles son, en general, las facilidades y los servicios disponibles mientras el Plan de Contingencia se encuentra activado / Indicate which are, in general, the facilities, available services while the contingency plan is activated.

Columna 7: Comentarios adicionales, si los hubiera / Additional comments, if any.

APPENDIX E

SINT MAARTEN VOICE AND DATA IMPLEMENTATION



APPENDIX F

Eastern Caribbean Point-of-Contact (PoCs) to Coordinate Matters Concerning WRC-2012

STATE	POINT-OF-CONTACT	ADDRESS	E-MAIL ADDRESS	TEL / FAX
Anguilla	James Prideaux Assistant Manager	Air Safety Support International PMB 2109 PO Box 3252 Road Town, Tortola British Virgin Islands	james.prideaux@caribairsafety.aero	T +1284 5419413 (C) T +1284 4957143 (O) F +1284 4957138
Barbados	Mitchinson H. Beckles Technical Officer, Training & Systems	Building 4 Grantley Adams Industrial Park Grantley Adams International Airport Christ Church, Barbados, BB 17089	civilav@sunbeach.net	T + 1246 428 6667 F + 1246 428 2539
British Virgin Islands	James Prideaux Assistant Manager	Air Safety Support International PMB 2109 PO Box 3252 Road Town, Tortola British Virgin Islands	james.prideaux@caribairsafety.aero	T +1284 5419413 (C) T +1284 4957143 (O) F +1284 4957138
ECCAA (<i>Representing Antigua and Barbuda, Dominica, Grenada, Montserrat, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Anguilla</i>)	Donald McPhail Director of Air Navigation Services	Eastern Caribbean Civil Aviation Authority Corner Factory Rd. & Nugent Ave. P.O. Box 1130 St. John's, Antigua	dmcphail@eccaa.aero	T + 268 462 0000 F + 268 462 0082
French Antilles	Jean-Jacques Deschamps Head of Technical Division	French DGAC, SNA-AG	jean-jacques.deschamps@aviation- civile.gouv.fr	T + 596 596 422507
Montserrat *	James Prideaux Assistant Manager	Air Safety Support International PMB 2109 PO Box 3252 Road Town, Tortola British Virgin Islands	james.prideaux@caribairsafety.aero	T +1284 5419413 (C) T +1284 4957143 (O) F +1284 4957138
	Steve Ryan	John A Osborne Airport Gerald's, Montserrat BWI.	ryans@gov.ms	664 495-5361 (Mobile), 664 491-6218 (Office)
Netherlands Antilles	Cedric D. Balentien CNS Manager	Netherlands Antilles Air Traffic Control (NAATC), Curaçao, Netherlands Antilles	c.balentien@naatc.an	T + 5999-839-3512 F + 599 9 868 3012

STATE	POINT-OF-CONTACT	ADDRESS	E-MAIL ADDRESS	TEL / FAX
	Vilmo Pieter ATS Manager	Netherlands Antilles Air Traffic Control (NAATC), Curaçao, Netherlands Antilles	vilmo.pieter@gov.an	T + 5999-839-3512 F + 599 9 868 3012
Trinidad and Tobago	Veronica Ramdath Manager Telecommunications & Electronics	Trinidad and Tobago Civil Aviation Authority P.O. Box 2163, National Mail Centre Golden Grove Road Piarco, Republic of Trinidad and Tobago, W.I.	vramdath@caa.gov.tt	T + 1868 669 4706 F + 1868 669 5239
United Kingdom	James Prideaux Assistant Manager	Air Safety Support International PMB 2109 PO Box 3252 Road Town, Tortola British Virgin Islands	james.prideaux@caribairsafety.aero	T +1284 5419413 (C) T +1284 4957143 (O) F +1284 4957138
United States	Robert Frazier Manager, Spectrum Planning and International Office	Federal Aviation Administration 800 Independence Ave. S.W. AJW-64, Room 715 Washington D.C 20591	robert.frazier@faa.gov	Not provided

Agenda Item 3: Follow-up on the Actions Taken on Valid Conclusions/Decisions from Previous Meetings and Review of the Terms and Reference (ToRs) of the E/CAR/WG

3.1 Review of the Conclusions/Decisions of the Previous E/CAR/WG and E/CAR/DCA Meetings

3.1.1 The Secretariat presented WP/15 for update and review of the status of the outstanding conclusions and decisions of previous E/CAR/WG/30 and 31 and E/CAR/DCA/22 Meetings. Additionally the pending action items of the previous E/CAR/WG/31 Meeting were reviewed. The Meeting agreed that the following conclusions were completed or superseded by time, events, incorporated into the NAM/CAR Regional Performance Based Air Navigation Implementation Plan or a subsequent NACC/WG are: Conclusions from E/CAR/WG: 31/1, 31/4 para. a), 31/5, 31/6 para. a), 31/6 para. e), 31/7 para. a) and 31/8.

3.1.2 The outstanding valid conclusions from previous E/CAR/WG Meetings are: 30/7, 31/2, 31/3, 31/4 para. b), 31/6 para. b), c), and d), 31/7 para. a) and b), 31/9

3.1.3 The outstanding valid conclusions from previous E/CAR/DCA/22 Meeting are: 22/1, 22/2, 22/4, 22/5, 22/7, 22/8, 22/9, 22/10 and 22/12.

3.1.4 The outstanding conclusions from E/CAR/DCA are proposed to change to completed or superseded by time, events, incorporated into the NAM/CAR Regional Performance Based Air Navigation Implementation Plan or a subsequent NACC/DCA are: 22/3, 22/6, 22/11 and 22/13.

3.1.5 Regarding the outstanding pending action items from the E/CAR/WG/31:

a) *Reference: Paragraph 2.2.2.3*

Antigua and Barbuda informed that they are not in a position to advise the meeting of the **actual plans for the Antigua Radar Project** as such decisions have to be made at a higher level by the Antigua authorities.

*Deliverable: Advances on Antigua Radar Project: Antigua and Barbuda
NOT COMPLETED*

b) *Reference: Paragraph 2.2.2.19*

Since Trinidad and Tobago had planned its AMHS implementation, the meeting suggested Trinidad and Tobago to **register in the AMC** and to take advantage of the information, operational features and testing data available on the AMC site for facilitation the implementation and operation of the AMHS.

*Deliverable: Register to AMC by Trinidad and Tobago: TTCAA
NOT COMPLETED*

- c) *Reference: Paragraph 2.2.2.25*
Frequency Management and ICAO position for WRC-2012: The Secretariat informed the Meeting (WP/14) of the latest actions and results regarding the update made to the radio frequency assignment lists for the CAR Region, as part of the preparation of information for its inclusion within the electronic Air Navigation Plan (eANP); reiterating the importance to have accurate information for the Regional Planning of the States. Barbados informed that they will provide some updates to these lists and the meeting was encouraged to provide further updates before the publication of the **updated versions of the lists, scheduled for the end of October.**

Deliverable: Update of frequency assignment list: ICAO NACC Regional Office
RESCHEDULED FOR AUGUST 2010

- d) *Reference: Paragraph 2.2.5.2*
The Meeting recognized the need for E/CAR States and Territories **to establish a tentative work programme for the transition from AIS to AIM** in accordance with the global roadmap (<http://www2.icao.int/en/anb/met-aim/aim/Pages/RoadmapfromAISToAIM.aspx>) and the regional actions to be proposed by the GREPECAS AIM/SG. Similarly, the Meeting considered important to **present the AIS/MAP action plans for resolving deficiencies. Both the tentative programme and the AIS/MAP action plans are to be submitted to the ICAO NACC Regional Office by 30 January 2010.**

Deliverable: Tentative programme & AIS/MAP action plans by States
NEW DATE DEC. 2011 BASED ON THE ROADMAP FOR THE TRANSITION
TO AIM.

3.2 Review of the Terms of Reference (ToRs) of the E/CAR/WG

3.2.1 The meeting took note that the E/CAR/WG Membership was modified by the Directors to include the United Kingdom and not its individual Territories and that non-E/CAR States/Territories would be excluded from the Membership; however, this did not preclude these States/Territories from being invited to attend the meetings, when applicable.

3.2.2 The meeting accepted the revised version of the ToRs and Work Programme of the E/CAR/WG, as presented in Appendix B to WP16.

3.2.3 The meeting was also informed on the designation of the Points-of-Contact (PoCs) for the E/CAR/WG as national coordinators for the execution and follow-up of the E/CAR/WG Work Programme in the different areas (AGA, ATM, CNS, MET, SAR and AIM). In this regard, Sint Maarten (Netherlands Antilles) designated their PoCs. The E/CAR/WG PoCs are presented in **Appendix A** to this report.

3.2.4 Similarly, the meeting reviewed the terms of reference and work programme of each of its Committees based on the adoption of the current work programme of the E/CAR/WG and recognized that several AIM, ATM, CNS and SAR activities were to be developed, therefore, maintaining the operation of the AIM, ATM, CNS and SAR Committees valid. The meeting also recognized the AGA activities that shall be carried out by the AGA Committee as presented by the Ad-hoc group AGA.

3.2.5 In this regard, the meeting agreed that the old ToRs of the Committees are no longer valid, nor applicable nor required for the Committees, and that the tasks of each Committee shall be properly defined and developed in accordance with the E/CAR/WG work programme, being understood that the same work method and considerations of the E/CAR/WG work programme shall be applied. Also, in order to make the work more efficient, the membership of each Committee shall be updated with its corresponding point-of-contact (PoC).

3.2.6 **Appendix B** presents the work programmes (action plans) for each of the AIM, AGA, ATM, CNS and SAR Committees with their membership. Due to the lack of active participation in each Committee and considering the need for an effective work of the Committee, the meeting considers that the membership should include the name of the persons and their contact information. Therefore, the following Draft Conclusion was formulated:

DRAFT

CONCLUSION 32/8

MEMBER DESIGNATION FOR THE E/CAR COMMITTEES

That in order to foster the active participation in each Committee to accomplish the work of the Committees, the E/CAR States/Territories who are members of the AIM, AGA, ATM, CNS and SAR Committees inform the ICAO NACC Regional Office of the name, position and contact information of the person being designated by their State/Territory to work in the Committees. This information shall be submitted no later than **30 July 2010**.

3.2.7 The meeting took note of the segregation of tasks between the CNS Committee and the E/CAR Network Technical Group (E/CAR/NTG) as requested by the DCAs, as well as the assignment of the radar data sharing tasks to the CNS Committee.

APPENDIX A

**STATE/TERRITORY POINTS-OF-CONTACT FOR E/CAR/WG
FOLLOW-UP AND IMPLEMENTATION ACTIVITIES**

BARBADOS

Mitchinson Beckles, Technical Officer, Training & Systems
E-mail: civilav@sunbeach.net

FRANCE

Philippe Guivarc'h, Chief of Air Navigation Services Antilles-Guyana
E-mail: philippe.guivarch@aviation-civile.gouv.fr

SINT MAARTEN (NETHERLANDS ANTILLES)

Eugene B. Holiday, President of Princess Juliana International Airport (PJIAE)
E-mail: eholiday@pjiae.com

Raul Van Heyningen, Manager Radar Department, PJIAE
E-mail: rvanheyningen@pjiae.com

TRINIDAD AND TOBAGO

Trevor Dowrich, Executive Manager ANS
E-mail: tdowrich@caa.gov.tt

UNITED KINGDOM

Margaret Wilson, Manager Caribbean Air Safety Support International
Director of Civil Aviation for Anguilla, the British Virgin Islands and Montserrat
E-mail: margaret.wilson@caribairsafety.aero

UNITED STATES

Michael Polchert, Air Traffic Organization, Federal Aviation Administration
E-mail: michael.polchert@faa.gov

ECCAA

Donald McPhail, Director General (ag)
E-mail: contact@eccaa.aero

Anthony Meade, Director Air Navigation Services (ag) and Chairman of the E/CAR/WG
E-mail: ameade@eccaa.aero

APPENDIX B

Name of Committee	Rapporteur	Membership	Work programme / Action Plan
AGA Committee	Paul Friedman United States	• Anguilla • Dominica • Montserrat • Saint Vincent and the Grenadines • Trinidad and Tobago • United States • ECCAA • IFATCA	Attachment 1
AIM Committee	Shirley Ford Barbados	• Barbados • France • Trinidad and Tobago • United States • ECCAA	Attachment 2
ATM Committee	Samuel Lampkin Trinidad and Tobago	• Antigua and Barbuda • Barbados • France • Grenada • Saint Vincent and the Grenadines • Trinidad and Tobago • United States • ECCAA • IFATCA	<i>To be developed by the Rapporteur</i>
SAR Committee	Trevor Dowrich Trinidad and Tobago	• Antigua and Barbuda • Barbados • France • United States • ECCAA	<i>To be developed by the Rapporteur</i>
CNS Committee	Veronica Ramdath Trinidad and Tobago	• Anguilla • Antigua and Barbuda • Barbados • Dominica • France • Grenada • Montserrat • Saint Kitts and Nevis • Saint Lucia • Saint Vincent and the Grenadines • Trinidad and Tobago • United Kingdom • United States • ECCAA • IFATCA	<i>Refer to DP/02</i>

ID	Task Name	Start	Finish	Deliverable	Comments	8	2009	2010	2011	2012	2013	2014	20
						tr	tr	tr	tr	tr	tr	tr	tr
36	 RPO.10.A. Implementation of Aerodrome Certification	Thu 1/1/09	Wed 12/31/14										
19	 A.1. Review GANDD deficiencies and develop remediation plan for each State	Mon 6/21/10	Wed 12/31/14	Recommended remedial actions									
20	 A.2. Review "lessons learned" from the development of master aerodrome safety and certification plans in the Region	Tue 6/21/11	Mon 12/31/12	Draft master safety and certification plans	USTDA/CASSOS Project. Participating States: Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, and Suriname.								
21	 A.3. Conduct aeronautical surveys, as needed	Tue 1/1/13	Wed 12/31/14	Aeronautical survey data	Aeronautical studies may not be conducted in cases of deviations from standards, if not specifically recommended in Annex 14, Vol. I.								
4	A.4. Development of aerodrome manuals	Tue 1/1/13	Wed 12/31/14	Guidelines on Aerodrome manuals	Reference: ICAO guidelines in Doc. 9774.								
37	 RPO.10.B. Analyze new requirements for rapid exit taxiways for increasing runway capacity.	Thu 1/1/09	Wed 12/31/14										
5	B.1. Develop / review aerodrome layout plans	Tue 6/21/11	Mon 12/31/12	Guidelines on Aerodrome layout plans									
24	 B.2. Review existing ICAO and international guidance	Tue 1/1/13	Wed 12/31/14		Reference: ICAO Aerodrome Design Manual, Part2, Doc. 9157								
38	 RPO.10.C. Implementation of action plans for runway incursion prevention.	Thu 1/1/09	Wed 12/31/14										
7	C.1. Develop runway safety plans (as an element of the master aerodrome safety plan).	Tue 1/1/13	Wed 12/31/14	Guidelines on Master aerodrome safety plan containing a runway safety plan									
39	 RPO.10.D. Implement the Airport Capacity analysis, Enhancement and Planning procedure (ACE)	Thu 1/1/09	Tue 12/31/13										
8	 D.1. Develop baseline aerodrome capacity levels (fair weather)	Tue 6/21/11	Mon 12/31/12	Baseline data									
9	D.2. Assess aerodrome capacity in reduced weather conditions	Tue 6/21/11	Mon 12/31/12	Data as a function of weather conditions									

Project: AGA Cmte Action Plans - 17Ju
Date: Thu 6/17/10

Task



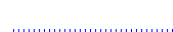
Milestone



External Tasks



Split



Summary



External Milestone



Progress



Project Summary



Deadline



ID	Task Name	Start	Finish	Deliverable	Comments	8	2009	2010	2011	2012	2013	2014	20
						tr	tr	tr	tr	tr	tr	tr	tr
28	 D.3. Review ICAO, international, and industry best management practices and standards for operations that enhance aerodrome capacity and efficiency.	Tue 6/21/11	Mon 12/31/12										
11	 D.4. Implement best management practices for operations in reduced weather conditions	Tue 1/1/13	Wed 12/31/14	Operational plan for irregular aerodrome operations									
40	 RPO.10.E. Minimizing the effects of adverse meteorological conditions on aerodrome operational capacity.	Thu 1/1/09	Tue 12/31/13										
12	 E.1. Identify communications and coordination practices for contingency planning	Tue 6/21/11	Mon 12/31/12	Master list of practices									
13	 E.2. Identify current and emerging technologies that support communications and coordination during contingency planning	Tue 6/21/11	Mon 12/31/12	Master list of practices									
32	 E.3. Development of contingency plans for procedures pertaining to irregular aerodrome operations	Tue 1/1/13	Wed 12/31/14	Operational plan for irregular aerodrome operations									
41	 RPO.10.F. Implement Airport Collaborative Decision Making (CDM): Unpredictable reduction of capacity; Turnaround and variable taxi times; and apron congestion	Fri 1/1/10	Wed 12/31/14										
33	 F.1. Review and measure aerodrome taxi and apron operations	Mon 1/2/12	Mon 12/31/12	Data on aircraft taxi and apron operations									
42	 RPO.10.G. Implement Advanced Surface Movement Guidance and Control System (A-SMGCS)	Tue 1/1/13	Wed 12/31/14										
34	 G.1. Review existing ICAO and International SMGCS documents	Tue 1/1/13	Tue 12/31/13		Reference: ICAO SMGCS Manual Doc. 9476-AN/927								
17	 G.2. Develop draft SMGCS plan for aerodromes in the Region	Wed 1/1/14	Wed 12/31/14	Draft master SMGCS plan									

Project: AGA Cmte Action Plans - 17Ju
Date: Thu 6/17/10

Task



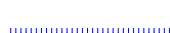
Milestone



External Tasks



Split



Summary



External Milestone



Progress



Project Summary



Deadline



ID		Task Name	Duration	Start	Finish	Deliverable	2010		2011		2012		2013		2014	
							tr	tr	tr	tr	tr	tr	tr	tr	tr	tr
19		Implementation of a Quality Management system for the region	641 days?	Fri 6/11/10	Fri 11/23/12	Guidelines for QMS implementation on E/CAR States										
20		Development a proposal on a E/CAR plan for the Implementation of e-TOD for areas 1 to 4	396 days?	Fri 5/21/10	Fri 11/25/11	Guidelines for Supporting the elaboration of proposal										
21		Support the preparatory and implementation activities to be carried out for the New Flight Plan format in the E/CAR Region	630 days?	Fri 6/18/10	Thu 11/15/12	Flight Plan investigations and evaluations										
22		Elimination of Missing and Duplicate flight plan in the region	89 days?	Fri 6/18/10	Wed 10/20/10	Communication of suggested actions and carry out evaluation										
23		Development a proposal for a E/CAR plan for the implementation of ICAO Road map for the transition of AIS to AIM	176 days?	Fri 6/18/10	Fri 2/18/11	Guidelines for AIM transition										

Project: AIM Cmte Action Plans - 17Ju
Date: Thu 6/17/10

Task



Milestone



External Tasks



Split



Summary



External Milestone



Progress



Project Summary



Deadline



Agenda Item 4: Other Business

E/CAR/WG web page

4.1 As established in the Terms of Reference of the E/CAR/WG, the meeting was informed, under WP/17, regarding the new E/CAR/WG web page developed by the ICAO NACC Regional Office to be a tool to exchange information and to coordinate relevant air navigation activities for the E/CAR Sub-region. The page is accessible through the “Regional Groups” icon available at the Home Page of the ICAO NACC Regional Office Website (<http://www.mexico.icao.int/>) and/or through its own address (<http://www.mexico.icao.int/ECARWG.html>). The page also includes a forum to assist the E/CAR/WG, its Committees and Task Forces to coordinate and advance their work between meetings. An online demonstration of the E/CAR/WG webpage was presented to the meeting.

4.2 The Meeting recognized the importance of this tool, thus, the Secretariat will create a section for each of the E/CAR/WG Committees so that their members make use of it. This action will be completed with the membership information from each Committee mentioned in the Report to Agenda Item 3 of this Report (paragraph 3.2.6 refers).

Constitutional reform of the Kingdom of the Netherlands

4.4 As mentioned in the Historical section of this report, the Meeting was informed on upcoming constitutional changes in the Kingdom of the Netherlands which currently consists of three countries named the Netherlands, Aruba and Netherlands Antilles. At the moment, Netherlands Antilles comprises a group of five Caribbean islands —Bonaire, Curaçao, Saba, Sint Eustatius and Sint Maarten. Curaçao and Sint Maarten are to become autonomous territories, same as Aruba. With these changes, planned to take effect on 10 October 2010, the Kingdom of the Netherlands will consist of the following countries: the Netherlands (the BES-islands included), Aruba, Curaçao and Sint Maarten.

4.5 In addition, Sint Maarten informed the meeting that a document will be released officially indicating the delegation of the portion of the SJU FIR labeled as the Juliana TMA. With the dissolving of the Netherlands Antilles, two plots of airspace within the Juliana TMA will be created, namely Saba and Sint Eustatius, which will become territories of the Netherlands.

Host and Dates for the Next Meeting

4.6 The Meeting took note that the third NACC/WG Meeting will be held in Guatemala in April 2011, and that the next E/CAR/WG meeting will take place in June 2012 in Barbados.