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North American, Central American and Caribbean Office

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NACC/DCA/3 – WP/03

07/08/08

Agenda Item 2: Air Navigation Services
2.1 Air Navigation Matters

RESULTS AND DEVELOPMENT OF THE NACC/WG

(Presented by the Secretariat)

SUMMARY

This working paper presents a summary of activities being carried out in the NAM/CAR Regions as part of the work and actions of the North American, Central American and Caribbean Working Group (NACC/WG) for the implementation of air navigation systems.

References:

- CAR/WG/1 Meeting Report (Port-of-Spain, Trinidad and Tobago, June 2007)
- NACC/WG/2 Meeting Report (Ocho Rios, Jamaica, 12 to 16 May 2008)
- ALLPIRG/5 Meeting Report (Montreal, March 2006)
- GREPECAS 14 Meeting Report (Costa Rica, April 2007)
- DGAC CAP/93 Meeting Report (Mexico City, July 2008)

Strategic Objectives

This working paper is related to Strategic Objectives A and D.

1. Introduction

1.1 The Fifth Meeting of the ALLPIRG/Advisory Group (ALLPIRG/5) held in Montreal from 23 to 24 March 2006, agreed to adopt an approach based on the development of their work and take steps to guarantee the harmonization of regional and national work with the ATM Operational Concept, while supporting the ICAO planning and implementation processes and the guidelines set by the ICAO Council. The GREPECAS/14 Meeting, through Conclusion 14/51, adopted the approach of the ALLPIRG/5 Meeting to harmonize the ATM regional work programme.

1.2 In this sense, and in accordance with the guidelines set by different meetings of Directors of Civil Aviation, the need to harmonize work programmes for air navigation services infrastructure implementation in the NAM and CAR Regions through a regional working group was identified.

2. Meetings of the NAM/CAR Regions Working Group

2.1 The First Meeting of the Caribbean Working Group (CAR/WG/1) was held in Port-of-Spain, Trinidad and Tobago, from 21 to 23 June 2007. The Meeting was attended by 42 participants from 12 States/Territories of the CAR Region, 1 State from the SAM Region and 3 International Organizations.

2.2 The Twenty First Meeting of Directors of Civil Aviation of the Eastern Caribbean (E/CAR DCA/21) and the Ninth Meeting of Directors of Civil Aviation of the Central Caribbean (C/CAR/DCA/9) approved CAR/WG Conclusion 1/1 and agreed to prepare an air navigation system regional implementation action plan that will be periodically assessed and will include resource allocation and budgetary adjustments for all parties involved. The E/CAR DCA/21 Meeting, through its Conclusion 21/7, also requested ICAO to develop a rotational list for NACC Working Group Meetings.

2.3 The Meeting noted that in spite of the fact that some States have initiated preparation of their national plans, such as NextGen of the United States, these have been prepared in different implementation formats. It is therefore necessary to harmonize the plans that contain medium and long term tasks to facilitate implementation of interoperable air navigation services (ANS) in the NAM/CAR Regions. The long term tasks would be progressively incorporated in accordance with the guidelines contained in ICAO Doc 9750 – *Global Air Navigation Plan*.

2.4 With these guidelines, the CAR/WG/1 Meeting initiated the task to harmonize the work programme for implementation of air navigation services infrastructure in the NAM and CAR Regions. **Appendix A** includes a summary of the work and issues addressed at this Meeting.

2.5 It was also agreed to modify the name of the working group to reflect the integral participation of both NAM and CAR Regions; therefore, the name of the group was changed from CAR/WG to NACC/WG.

2.6 The Second Meeting of the North American, Central American and Caribbean Working Group (NACC/WG/2) was held in Ocho Rios, Jamaica from 12 to 16 May 2008. The Meeting was attended by 54 participants of 14 States/Territories of the NAM/CAR Regions, 1 State from the SAM Region, 3 International Organizations and 1 service provider. **Appendix B** includes a summary of the work and issues dealt by this Meeting.

Relevant Conclusions and Considerations

2.7 **Appendix C** to this paper includes the updated status of the Conclusions from the CAR/WG/1 and the NACC/WG/2 Meetings. From this update, NACC/WG Conclusion 2/5 deals with the organization of the NACC/WG including its terms of reference and management of the Subregional Working Groups (C/CAR, E/CAR, CA/ANE and CAN/MEX/USA), as well as the NAM/CAR Implementation Plan. In short, there are 9 outstanding Conclusions, 4 from the CAR/WG/1 and 5 from the NACC/WG/2. Appendix D includes the terms of reference, work programme and agreed structure for the meetings of the NACC/WG.

2.8 Within the issues addressed under Agenda Item 4 of the NACC/WG/2 Meeting, it is important to mention that States need to pay special attention to the new Flight Plan format that was circulated to States/Territories/International Organizations and to the implementation date, which is 2012. In this regard, the harmonious transition and implementation of this new Flight Plan format should be planned, and those States/Territories/International Organizations who are either updating or are planning to modernize their Flight Plan Processing Systems need to take this new format into account.

2.9 Likewise, Agenda Item 5 of the NACC/WG/2 Meeting considered highly important the need to promote an integral technical co-operation project for the CAR Region in order to assist States with development and implementation of modern air navigation systems covering aerodromes and safety issues in accordance with global aviation needs. In this respect, the Meeting will review WP/19.

2.10 The results and progress accomplished by the NACC/WG were presented to the Ninety-third Meeting of Directors of Civil Aviation of Central America and Panama (DGAC CAP/93), who took note of this progress.

3. Suggested Actions

3.1 The Meeting is invited to:

- a) Take note of the information contained in this working paper;
- b) analyze, review and approve the draft conclusions of the CAR/WG/1 and NACC/WG/2 Meetings referenced in paragraph 2.7 of this paper;
- c) review and comment on the proposed terms of reference, work programme and organization for the NACC/WG (NACC/WG Conclusion 2/5) detailed in Appendix D to this paper;
- d) recommend and analyze paragraph 2.8 related to the new Flight Plan format; and
- e) consider and recommend any other actions deemed appropriate.

APPENDIX A CAR WG/1 MEETING SUMMARY

Agenda Item 1: General Matters

1.1 Valid Conclusions/Decisions of Previous DGCA CAP C/CAR WG, C/CAR DCA, E/CAR WG, E/CAR DCA Meetings

1.1.1 Under this Agenda Item, the Meeting reviewed the status of compliance of outstanding conclusions of previous meetings of Central and Eastern Caribbean Working Groups, Directors of Civil Aviation. Regarding the Conclusions from the 92nd Meeting of Directors of Civil Aviation of Central America and Panama, the Meeting was unable to review these Conclusions due to the fact that Central American States and COCESNA were not represented at the Meeting.

1.2 Review of the Status of Air Navigation Deficiencies

1.2.1 The Meeting took note that:

- not all States have provided their action plans to resolve air navigation deficiencies to the Regional Offices, thus resulting in a lack of updates by States/Territories in the GANDD
- the potential of the GREPECAS database on air navigation deficiencies (GANDD), which is available electronically on the NACC website, has not been taken advantage by the majority of States, in some cases, this is due to lack of staff responsible for coordinating this issue in States/Territories. The Meeting recalled GREPECAS Conclusion 14/59, which states the requirement to have a National Coordinator responsible for updating the GREPECAS Air Navigation Deficiencies Database (GANDD).
- since the ICAO Council approved the implementation of the Uniform Methodology for the identification, assessment and reporting of air navigation deficiencies in 2001, several changes have been introduced that impact the regional process for the reporting and resolution of air navigation deficiencies. Therefore, it is necessary to promote new measures aimed at supporting States in resolving their deficiencies and establishing dates for solution implementation.

1.3 Analysis of ICAO and GREPECAS Guidance on Global, Inter and Intra-Regional Air Navigation Activities

1.3.1 The Meeting took note that in accordance with GREPECAS guidelines, from now on each state and working group in the CAR Region will be required to develop an action plan to exercise their conclusions. This action plan will be evaluated, including corresponding budgetary adjustments and resource allocation, according to the action plan adopted by GREPECAS conclusions. In reassessing the terms of reference for all the working groups in the CAR Region, the ICAO NACC Office is developing a common approach in order to align their work programmes with the Strategic Objectives of the Organisation, and has programmed a comprehensive regional consultation with the Civil Aviation Authorities to conclude the review of the terms of reference for all the aforementioned groups by mid-2008. Considering the above, the Meeting adopted ***Draft Conclusion 1/1 – Implementation of Air Navigation Systems in the CAR Region.***

Agenda Item 2

2.1.2 The Meeting created a regional ATM Task Force in the CAR Region with the purpose of analysing the optimisation of the airspace and ATS route structure. The group is based on operational requirements and customer needs, reviewing and assessing the current ATM structure, identifying the roadmap related areas of improvement and development, and aimed at achieving a seamless ATM system in the CAR Region. To this effect, the meeting adopted ***Draft Conclusion 1/2 – Creation of a CAR ATM Task Force.***

2.2.1 It was determined that the Caribbean Region still requires improvement with current airspace fragmentation; it also requires harmonisation of the diverse national system and improvement with airspace segregation for military use, which often prevents optimum use of airspace, thus limiting the system's capability to meet operational demand. It was also considered that States should increase their efforts to optimise and redesign route structures and airspace to accommodate current systems, while ensuring that emerging systems and new technological solutions can be integrated into the air navigation infrastructure. The goal is to achieve transparent functions, procedures and operations in different airspaces.

2.2.2 Considering ICAO's goal as the basis to limit or reduce fuel emissions, States were reminded of the responsibility to analyse the impact that air transport has on global climate. This entails firm actions in order to review and improve ATS areas and routes structures, airspace operational management, and airports with a promotion of flight planning and flexible tracks, RNAV and RNP continental airspace implementation, continuous descent approach implementation, delay and airport noise reduction, etc.

2.2.3 The Meeting was informed on the activities of the WATRS Plus Project and the RNP 10 implementation with 50 NM of lateral separation and ATS route redesign in the WATRS airspace is foreseen for 5 June 2008. The meeting agreed on ***Draft Conclusion 1/3 – Endorsement of WATRS Plus Project.***

2.2.4 It is evident that with the implementation of RNP, there is a close connection between the criteria for the design of en-route and terminal area operational procedures and airspace and the assurance that only those aircraft, systems, and operators with certified performance be authorised to conduct such operations. When operational risk assessment requirements, as well as national regulations for PBN approval of aircraft and operators are being developed, it is advisable to consider the guidance and operational criteria developed by ICAO. Also, it is important that States/Territories/International Organisations use all possible resources for training air traffic controllers and pilots, bearing in mind future implementation of this concept in the CAR/SAM Regions and in accordance with the PBN Roadmap approved by GREPECAS/14, which establish short-term (until 2010) and medium-term (2011-2015) to prepare their own action plan implementation.

2.3 Follow-up on activities relating to Air Traffic Flow Management implementation (ATFM)

2.3.1 Based on the strategy and work programme approved by the GREPECAS/14 Meeting for ATFM service implementation, an action plan was presented so that States, Territories and International Organisations can develop their ATFM implementation plan in the CAR Region. The Meeting took note that in order to ensure capacity, ATS providers are required to develop a 5-year plan that includes sufficient competent staff in order to provide safe, regular and efficient services. ATS capacity analysis should be mainly focused on workload studies caused by air operations, as well as on necessary measures to balance the demand of these operations and the service provided.

2.3.2 The Meeting dealt with the Collaborative Decision Making (CDM) concept and issues related with ATFM operations, indicating that the stakeholders should use all possible means and electronic instruments available that will allow them to analyse different scenarios presented, and they should coordinate initiatives agreed upon in order to balance demand and capacity. Teleconferences have proven to be an excellent media to ensure the participation of all parties involved.

Regional Contingency Procedures: The Meeting was informed of the activities undertaken by the *Hurricane Hunters – Aircraft Flight Operations* under the call signs TEAL & NOAA. As the Hurricane Hunters area of operation includes the Caribbean, Gulf of Mexico, Central and Eastern Pacific, and Western Atlantic, coordination is expected with North American, Central American, and Caribbean States.

2.4 Follow-up on implementation programmes related to Air Traffic Management (ATM) safety management

2.4.1 The Meeting took note that within the implementation activities related to Air Traffic Management (ATM) safety management, the SMS Course stands out. The course is being carried out by ICAO for all the States, Territories and International Organisations who require so for the SMS implementation.

2.5 Follow-up on progress achieved in Search and Rescue

2.5.1 States should adopt solid cooperation measures to provide SAR services from other locations to satisfy sufficient air coverage requirements in the appropriate areas. For the effectiveness of this process, it is of vital importance to ratify and/or develop bilateral and multilateral agreements in order to provide SAR services. The Meeting was of the opinion that this should be reviewed by a specific SAR experts meeting and agreed on *Draft Conclusion 1/4 – Review of the Multilateral SAR Agreement Model*.

Agenda Item 3: CNS Developments

3.1 Follow-up on the status of the E/CAR AFS and MEVA II digital networks and their related inter and intra-regional interconnection/integration

3.1.1 The Meeting took note of some guidelines prepared by ICAO on VSAT networks to establish a basis for planning and basic system design of such network in support of aeronautical ground-ground communications and it followed-up on the development and interconnection/integration status of the Caribbean sub-regional and regional digital networks, namely the MEVA II VSAT Network and the E/CAR Digital Network

3.2 Development of voice and data air-ground communication

3.3 Development of ground-ground communications

Regional Plan for the implementation of air-ground data links

3.2.1 The Meeting took note of the Activities Plan and Regional Programme for the implementation of air – ground data links, which were adopted through GREPECAS Conclusion 13/72. Also, based on Table CNS 2A – *CAR/SAM Regional Plan of the Aeronautical Mobile Service (AMS) and Aeronautical Mobile Satellite Service (AMSS)* of the FASID, recently reviewed by the GREPECAS/14 Meeting. Therefore, the Meeting agreed on *Draft Conclusion 1/5 – Proposal for Amendment to the FASID Table CNS 2A*.

3.2.2 The Meeting took note of the latest status of the ATN SARPs and ICAO guidance material; of the ATN deployment completion in the CAR Region, which should take place after 2015; of the implementation initiatives for ATN ground-ground applications (Table CNS 1BB – *ATN Ground-Ground Applications Plan*); of the AMHS implementation National Plans and the preliminary regional approach for the implementation of the AMHS Internet Protocol, with IPS version IPv4 and IPv6. To this end the meeting agreed on *Draft Conclusion 1/6 – Preliminary Regional Approach for the Implementation of the Internet Protocol for AMHS*.

3.2.3 The establishment and implementation of the Action Plan for the implementation of voice communications and ground-ground and air-ground data was agreed through ***Draft Conclusion 1/7 – Establishment and Implementation of an Action Plan for the Implementation of Required Ground-Ground and Air-Ground Voice and Data Communications.***

3.4 GNSS Implementation

3.4.1 The Meeting took note of the SARPs, amendments to the new SARPs and ICAO guidelines for the progressive implementation of GNSS elements, the Conclusions of the study of cost-allocation for global navigation satellite systems (GNSS) and reviewed FASID, Table CNS 3 that represents the regional plan for navigation systems. For this end, ***Draft Conclusion 1/9 – E/CAR Point-of-Contact for Updating FASID Table CNS 3*** was formulated. Considering GREPECAS Conclusion 14/56 – *Progressive Deactivation of NDB Stations*, the meeting agreed on ***Draft Conclusion 1/8 – Deactivation of NDB Stations in the Eastern Caribbean.*** Follow-up was given to the studies, trials and results of the regional projects related with the GNSS, RLA/00/009 and RLA/03/902 and ***Draft Conclusion 1/10 – Follow-up on GNSS Activities – Cycle 2007-2008*** was formulated.

3.4.2 The Meeting adopted an Action Plan for the follow-up of the GNSS implementation in accordance with ***Draft Conclusion 1/11 – Establishment and Implementation of an Action Plan for GNSS Implementation.***

3.5 Review of the planning and implementation of surveillance systems.

3.6 Radar data sharing among neighbouring ATS units

3.5.1 The Meeting noted Global Air Navigation Plan on data-based surveillance and ICAO SARPs and guidance, the Preliminary Regional strategy for the ADS-C and ADS-B deployment and ADS-B, ADS-C and other surveillance systems Implementation Initiatives was followed-up on by formulating ***Draft Conclusions 1/12 – ADS-C Trials in the CAR Region*** and ***1/13 – Application of Multilateral System as a Surveillance Option.***

Radar data sharing

3.5.2 The Meeting was informed about some considerations on radar data sharing and adopted an Action Plan for the Implementation of Surveillance Systems through ***Draft Conclusion 1/15 – Establishment and Implementation of an Action Plan for Surveillance Systems Implementation.***

3.5.3 The support for the ICAO position for the ITU WRC-2007 was agreed through ***Draft Conclusion 1/16 – Finalising the Regional Preparation and Support to the Updated ICAO Position for the WRC-2007.***

Agenda Item 4: Establishment of interfaces for ATM automated systems between adjacent ATS units

4.1 The Meeting noted that there is at present a high automation level in the control centres; therefore, the States/Territories/International Organisations should continue working according to the Regional Strategy for the Integration of Automated Systems including related activities such as: the integration of automation systems, use of an Interface Control Document (ICD), encouraging the planning and development of human resources and establishing coordination between States / Territories / International Organisations. In this sense the Meeting agreed on ***Draft Conclusion 1/17 – Establishment of an Action Plan for Interface Implementation to Establish ATM Automated Systems among ATS Adjacent Units.***

Agenda Item 5 Other air navigation matters

5.1 The human resources and training planning was analyzed that it was concluded that the lack of personnel affects service capability; therefore, having an adverse impact on safety and efficiency.

5.2

5.2 A review of the AIS/MAP – AIM activities was made regarding the main tasks that are still pending and the importance of training AIS/MAP experts from States/Territories/International Organisations. As a result of the follow-up to these AIS/MAP issues, the Meeting formulated ***Draft Conclusion 1/18 - Implementation of an AIS/MAP AIM Action Plan and Participation of Officers in the Seminar on Terrain and Obstacles Electronic Data (e-TOD) and the Follow-up Meeting.***

APPENDIX B

NACC WG/2 MEETING SUMMARY

Agenda Item 1: General Matters

1.1 Valid Conclusions/Decisions of the Previous CAR WG/1 (renamed as the NACC/WG), C/CAR DCA, E/CAR WG, E/CAR DCA and CAP/DCA Meetings

1.1.1 The Meeting reviewed the Conclusions and Decisions in order to update them and keep their number at a minimum consistent with progress achieved.

1.2 Review of the Status of Air Navigation Deficiencies

1.2.1 The Meeting took note that based on the uniform methodology for the identification, assessment and reporting of air navigation deficiencies formulated and updated by the ICAO Council and of the problems to access and update the information contained in the GANDD database posted on the ICAO website. The Secretariat informed that the GANDD is being upgraded to be more user-friendly and easy to use in accordance with GREPECAS recommendations. The Meeting concluded that States should use the GANDD and provide updated information to the ICAO NACC Office.

1.3 Analysis of ICAO and GREPECAS Guidance on Global, Inter and Intra-Regional Air Navigation Activities

1.3.1 The Meeting noted that the objective of the planning tools is to harmonise work programmes, improve report presentation processes and ensure interoperability and transparency among the Regions, as well as ensure the development and measurement of performance objectives.

1.3.2 As follow-up to action plans proposed by the CAR/WG/1 Meeting for States/Territories to develop their national implementation plan, it was recognized that the latter represents a more effective vision for the implementation of infrastructure and air navigation services using resources more efficiently, while orienting action plans towards performance measurement during the implementation process. The objective is to prevent costly data collection and analysis processes. Performance measurement should focus on proactive results from air navigation improvements and environmental benefits that result from work programmes.

Agenda Item 2: ATM Developments

2.1 Follow-up on the Implementation Strategies and Activities Related to the ATM Performance Objectives Approved by GREPECAS

2.1.1 The Meeting reviewed the ATM system planning requirements according to regional action plans for a seamless ATM system, taking into account the work carried out by the C/CAR WG, E/CAR WG and Central America. It was recognized that airspace capacity is still the primary concern for the aviation community as there is increasing demand on capacity and performance of airspace management as traffic growth increases.

2.1.2 It was recognized that achievement of performance of expectations is made possible by:

- services and procedures
- human resources
- physical infrastructure
- systems and technology
- regulation and standardization

2.1.3 Doc 9882 - *Manual on Air Traffic Management System Requirements* reflects the current reality and identifies requirements where a significant change to operating practices will be required. The set of foregoing requirements should be compared with other sources of requirement documentation across the spectrum of operations envisioned in Doc 9854. These requirements should be used by working groups as well as States when developing implementation strategies and plans at regional and national levels. These requirements may be reproduced directly or used in specific component areas to qualify as specific requirements of a particular component.

2.1.4 The Meeting was of the view that States/Territories/International Organizations should consider the development of ATS communication requirements in line with aircraft COM capabilities and identify other traffic flows for similar requirements in conjunction with ATM capabilities.

2.1.5 The Meeting deemed appropriate to foster an initiative to analyze airport capacity as one of the major elements that adversely affects the ATM system and airline operators. Infrastructure in many airports needs to be upgraded in order to meet growing demand with the aim of achieving enhanced handling capacity and reducing frequency congestion. Some initial steps to increase airport capacity are to minimize runway occupancy times and recommend improvements to airport infrastructure and departure procedures. Moreover, close parallel runways and crossing runways at CAR airports, as well as ATC training requirements for these operations, should be developed.

2.2 Follow-up on Regional Activities and Implementation Relating to Airspace Organization and Management (AOM)

2.2.1 The Meeting recognized that CAR Region airspace has a very strategic geographical location at the confluence of ATS routes connecting major destinations and serves as a vital link to smooth traffic flow between major airspaces in NAM and CAR Regions.

2.2.2 Civil commercial, military, general aviation, space research flights, hobby and adventure flying, training flights, and helicopter flights have experienced continuous growth thereby increasing airspace congestion day by day (average annual rate of 3.3%). Available technological innovations provide simpler and more flexible solutions not only for transportation needs, but also for national security and economic development.

2.2.3 It was also recognized that the evolution of ATM tools and procedures has been at a much slower rate in comparison to current day aircraft equipment. In addition, there are many radar and VHF facilities installed that do not always cover a complete area, which reduces their effectiveness in reducing spacing between aircraft in accordance with ICAO standards.

2.2.4 Regarding the improvements to Airspace and Organization Management (AOM), excellent initiatives have been implemented to improve the ATM system such as the WATRS Plus Project, ATM automation and improvements to the network route system to and from the NAM, CAR and SAM Regions (implementation of RNP in the Gulf of Mexico, harmonization of transition altitudes in the Eastern Caribbean, harmonization of airspace classification between adjacent airspaces, and civil-military coordination for flexible use of airspace implementation). With RVSM implementation, NAM and CAR Regions are aligned to cruising levels for IFR/VFR flights in accordance with Appendix 3 to ICAO Annex 2.

2.2.5 Information was provided regarding the progress of the WATRS Plus Project and that a CD of lessons learned will be distributed soon regarding the implementation of this project. Final information for WATRS Plus implementation on 5 June 2008, will be posted on FAA webpage:

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/enroute/oceanic/

2.2.6 During the Meeting, several States provided information on actions carried out by them: Mexico informed of its activities with United States to develop a PBN implementation plan in the Gulf of Mexico and invited other States, IATA and COCESNA to join these activities in order to expand the benefits of this implementation to other areas of the Caribbean. Colombia, Haiti, Jamaica and Netherlands Antilles analyzed, in the short term, other options for improving airspace structure and ATS route network; as well as other related FIRs under their jurisdiction.

2.3 Follow-up on Activities Relating to Air Traffic Flow Management Implementation (ATFM)

2.3.1 The Meeting noted ATFM work and coordination accomplished to date between Piarco ACC, Mexico Flow Control Centre (CCFMEX), NAV CANADA National Operations Centre (NOC), and the Federal Aviation Administration Air Traffic Control System Command Center (FAA ATCSCC).

2.3.2 The Meeting identified the necessary elements to include in a regional handbook for the implementation of an ATFM system, such as a regional model for determining: 1) operational procedures; 2) aerodrome acceptance rate (AAR); and 3) enroute sector capacity. Also recommended was the development of a proposal for amendment to Doc 7030 and a regional database including: 1) en-route capacity; 2) apron/parking capacity at aerodromes; 3) AAR (aerodrome acceptance rate); 4) city pair route alternatives for customer use; and 5) identification of regional facilities to serve as host of the daily 1315 UTC Caribbean ATFM telcon. In this sense, ***Draft Conclusion 2/1 – Adoption of a NAM/CAR ATFM Operational Procedures Handbook*** was formulated.

2.4 Follow-up on Implementation Programmes Related to Air Traffic Services (ATS) Safety Management

2.4.1 The Meeting took note of the ICAO SMS training programme, which has detected the necessity to implement other programs such as runway safety (incursions), bird hazard prevention, language proficiency, Normal Operations Safety Surveys (NOSS), and safety performance monitoring and measurement as well as the use of the electronic Accident and Incident Reporting System (ECCAIRS) to verify that the defined level of safety is met and to continue improvements of the safety system.

2.4.2 It was concluded that States should participate in activities organized by the NACC Office for harmonized implementation of SMS with ATS Quality Assurance Programmes developed by the States/Territories/International Organizations of the CAR Region.

2.5 Follow-up on the Progress Achieved in Search and Rescue

2.5.1 The Meeting concluded on the importance to establish a SAR Quality Assurance Programme and adopted *Draft Conclusion 2/2 – Development of National SAR Services Quality Assurance Programme*.

2.6 Follow-up on ATS Contingency Plans

2.6.1 It was considered necessary to have coordination measures for hurricanes and volcanic ash procedures be disseminated among pilots and controllers for homogeneous application in the CAR Region. The Meeting also considered it necessary that these procedures be included as an attachment to contingency plans, and that they should be provided to ATFM units, ATS units and other units/agencies, as applicable, within the coordination agreements. Therefore, *Draft Conclusion 2/3 – Implementation of Additional Coordination Procedures for Hurricanes and Volcanic Ash* was adopted.

2.6.2 Follow-up was given to contingency plans and the importance of their coordination with all parties involved in order to apply proper contingency measures and that they be prepared in accordance with the format approved by GREPECAS and to coordinate them together with the ICAO NACC Office in order to have the ATS Contingency Plans Catalogue duly updated and harmonised between adjacent FIRs.

Agenda Item 3: CNS Developments

3.1. Follow-up on the Status of the Eastern Caribbean (E/CAR) Aeronautical Fixed Service (AFS) and MEVA II Digital Networks and their Related Inter and Intra-Regional Interconnection/Integration

3.1.1 The use of digital networks, both in the implementation of new networks and updating of existing ones, must consider the use of technology available in the industry, offering greater efficiency and providing the desired services with the required performance and interoperability to keep adequate safety levels at minimum cost, as expressed in GPI-22 of the Global Air Navigation Plan – *Communication Network Infrastructure*.

3.1.2 The Meeting was informed that after the first year of the MEVA Network upgrade, the results achieved were found highly satisfactory; the progress of the Action Plan for the Implementation of MEVA II and REDDIG Interconnection was also informed.

3.2 Follow-up on the Action Plan for the Implementation of Voice and Data Air-Ground Communication

3.3 Follow-up Activities for the Implementation of Ground-Ground Communications

3.2.1 The Secretariat informed the Meeting regarding the SARPs development status and ICAO guidance material related to voice and data ground-air and ground-ground communications.

3.2.2 Note was taken of the proposal for amendment to the ANP FASID: *Aeronautical Mobile Service and AMSS* (Table CNS 2A), the *AFTN Plan* (Table CNS 1A), the *ATS Direct Speech Circuits Plan* (Table CNS 1C), and the *CAR/SAM Regional Plan of Ground-Ground Applications* (Table CNS 1Bb). Based on the update of the Aeronautical Mobile Service Plan and AMSS, and in accordance with the agreements made by the CAR/WG/1, the Meeting anticipated that the air-ground data links would be implemented after 2015.

3.2.3 Information was provided of the work of ATN Task Force, where several aspects regarding the AMHS, the transition from IPv4 to IPv6 and the updating of the *CAR/SAM regional Plan of ATN routers* (Table CNS 1Ba) will be addressed. In addition, it was informed that the CAR/SAM Regional Plan of air-ground applications (Table CNS 1Bc) would be completed at a later date.

3.2.4 As part of the regional planning for the AMHS system implementation in the region, the Meeting reviewed and took note of the ICAO registry for the addresses and management domain identifiers that will be used in the air traffic services message handling system (ATSMHS), which are based on the guidelines and instructions sent by the Secretary General State Letter Ref. SP 54/1-03/39, dated 30 May 2003.

3.4 Follow up to GNSS Implementation and Action Plan

3.4.1 The Meeting took note of the considerations, the amendments to the SARPs and references for the GNSS Implementation Action Plan.

3.4.2 It was mentioned that based on CAR/WG/1 Conclusion 1/9, ICAO requested States, through letter Ref. EMX0102 dated 31 January 2008, to designate a point-of-contact to update Table CNS3 and provide comments and amendments.

3.4.3 Addressing GREPECAS Conclusion 14/56 – *Progressive Deactivation of NDB Stations*, the Secretariat presented, for review by the Meeting, an inventory of existing NDB equipment within the Region (Appendix to WP/15); information was obtained from:

- List No. 1 – List of Facilities operating on Frequencies in the LF/MF Band (190-1750 KHz);
- available information of Table CNS 3 of the ANP, VOL II (FASID), Doc 8733; and
- information published by States in their AIPs and other aeronautical publications.

3.4.4 Therefore, the Meeting took note that the ICAO NACC Regional Office expects to obtain information and comments related to the inventory of existing NDB equipment for the progressive deactivation of NDB stations no later than **20 June 2008**. Dominican Republic, Haiti, Jamaica and Netherlands Antilles provided some comments on inventory.

3.4.5 The Meeting followed-up on the activities and results of regional GNSS projects - RLA/00/009 and RLA/03/902.

3.5 Review of the Planning and Implementation of Surveillance Systems and Follow-up to their Respective Action Plan(s)

3.5.1 The Secretariat informed the Meeting regarding the ICAO SARPs and guidance material and references for the Surveillance Systems Implementation Action Plan.

3.5.2 The Surveillance Task Force Rapporteur informed the Meeting about the progress accomplished with the unified regional strategy for implementation of surveillance systems and the list of activities that States/Territories/International Organizations have to consider for the implementation of ADS-B trials. Likewise, several States provided information regarding their surveillance systems activities and trials such as the United States who informed of the benefits from future use of ADS-B, and that they can assist CAR/SAM States by providing both technical expertise and a contract vehicle for procuring turn-key surveillance services; Trinidad and Tobago with their future MLAT/ADS-C/ADS-B; implementation plans; Cuba informed that they concluded the ADS-B data collection phase and their plans to renew their radars and COCESNA, who informed of their ADS-B data collection activities, as well as the current capabilities in the CENAMER Control Centre for ADS-C and CPDLC functionalities.

3.6 Surveillance Data Exchange and Sharing

3.6.1 The Meeting noted the coverage of current radar systems operating in the region. The Meeting was informed of radar data sharing activities being carried out by States/Territories/International Organizations:

- Mexico and COCESNA have signed a technical co-operation agreement for radar data exchange, especially the Belize and Cancun radar systems. Likewise, information was received on radar data sharing coordination carried out between Cayman Islands and COCESNA as part of the existing co-operation agreement between both administrations.
- Data sharing between Bahamas, Bermuda, Canada and United States.
- Radar data exchange in Central America among the States and COCESNA: Niktun (Guatemala) radar, Managua and Bluefields (Nicaragua) radar, Monte Crudo (Honduras) radar and Mata de Caña (Costa Rica) radar, as well as radar data sharing for operational use (radar data from Monte Crudo at the Toncontin Airport in Honduras and radar data from Mata de Caña at the Juan Santa Maria airport in Costa Rica).
- Radar data sharing between COCESNA and Cayman Islands, as well as between COCESNA (Puerto Cabezas radar) and Panama.
- The beginning of a project for the exchange of radar data between Cuba, Jamaica and COCESNA.
- Coordination for radar data exchange between Trinidad and Tobago and French Antilles and Barbados.
- The modernization of the radar system installed in San Jose, Costa Rica.

3.6.2 Based on radar coverage and the information provided during the Meeting, the participants identified several radar data sharing arrangements that could be carried out including Dominican Republic with Haiti, Colombia/Venezuela with Netherlands Antilles, among others. Likewise, the Meeting noted the existence of communication means and capabilities for this radar data exchange through the regional digital networks.

3.6.3 Currently, several CAR Region States/Territories/International Organizations have achieved significant progress with ATM automation, including considerable processing capacity and several available automated functionalities, which together with surveillance data sharing would result in operational safety and efficiency benefits, airspace optimization and mutual backup between adjacent ATS units, significantly improving airspace management harmonization.

3.6.4 The Meeting was informed that other regions have experience with both radar data and ADS-B data surveillance data sharing as is the case of Australia and Singapore, who have developed a letter of agreement sample; and it was agreed to take into consideration this information for ADS-B related activities.

3.7 Other Communications Matters

3.7.1 The satisfactory results accomplished at the WRC-2007 regarding the ICAO position were noted. Likewise, the Meeting was informed that ICAO, through its Aeronautical Communications Panel (ACP), is working on the preparation of aspects and considerations for the forthcoming WRC-2011 Meeting, urging States/Territories/International Organizations to support and take action once the position for WRC-2011 is informed.

3.7.2 It was also informed that the update of the following radio frequency lists, *List N° 1 – List of Facilities Operating on Frequencies in the LF/MF Band (190-1750 kHz)*; *List N° 2 – Record of VHF Frequency Assignments to Caribbean VOR and ILS Radio Navigation Aids*; and *List N° 3 – Record of VHF Frequency Assignments in the Band 117.975-137.000 MHz*. The lists are available for reference on the ICAO NACC Office website (<http://www.icao.int/nacc/>) under the **Radio Frequency Assignment Lists** link. The Meeting agreed to notify the NACC Regional Office of any discrepancies and update or confirm the information contained in the lists before **20 June 2008**.

Agenda Item 4: Establishment of Interfaces for ATM Automated Systems between Adjacent ATS Units

4.1 In this regard, the *Strategy for the Integration of ATM Automated Systems*, and that GREPECAS Conclusion 14/43 – *Agreements for ATM Automated Systems Interface*, was noted by the Meeting. Also considered were:

- guidelines contained in Doc 4444 on procedures related to coordination to be carried out by air traffic service units, between control positions within such units, between such units and associated aeronautical telecommunication stations, and the types of messages and their contents to be used for operational communications between ATS unit computer systems. The current flight plan (CPL) is referred to within the coordination messages.
- the capabilities of current digital networks and the number of control centres and ATS units in the Region that have been modernized allowing for greater data processing capacity with the implementation of flight data processing systems (FDPS), radar processing (RDP), support systems, message display systems, message switching, and prevention and enhanced safety tools (MSAW, DAIW, MTCA, etc.).
- The availability of surveillance data from radar and non radar data sources could be useful in improving service accuracy, availability and safety in the Region.

4.2 Information was provided about the problems caused by multiple/duplicate flight plans for ATS service providers. It was agreed that this problem is global and that the active participation of all parties involved as well as increased ATM automation will reduce this problem, therefore, the Meeting adopted ***Draft Conclusion 2/4 – Actions to Avoid Duplication of Flight Plans.***

4.3 The Secretariat provided information related to a new proposal for amendment to the ICAO flight plan provisions contained in the *Procedures for Air Navigation Services - Air Traffic Management* (PANS-ATM, Doc 4444). The proposal was sent on 25 May 2007, by the Secretary General to Contracting States and appropriate International Organizations through State Letter AN 13/2.5-07/35. Expectations are that the proposal will be in force November 2012. The amendment provides new information on the ICAO model flight plan format and associated operational practices to meet future aircraft needs with advanced capabilities and the evolving requirements of automated air traffic management systems, while taking into account compatibility with existing systems, human factors, training, cost and transition aspects.

4.4 It was acknowledged that in many cases, the current organizational structure of ANS in several States neither allows specialized personnel to carry out the functions in dispatch positions and flight control nor supervise safety oversight of operators and service providers. For this reason, it was considered that human resource planning and training is needed for dispatch officers to properly perform their functions.

4.5 The United States informed the Meeting on the assignment of preferential routes based on flight plan information in preparation for the implementation of the En Route Automation Modernization (ERAM) system, as well as implementation benefits of AIDC application.

Agenda Item 5: AIS (AIM) Developments and Follow-up

5.1 Follow-Up to Activities and Regional Implementation Related to the Objectives of Aeronautical Information Services AIS/MAP (AIM)

5.1.1 The Meeting reviewed the main outstanding tasks from the GREPECAS AIS/MAP/SG/10 Work Programme and several updates and comments were provided by States:

- a) Trinidad and Tobago asked for ICAO support to coordinate with Venezuela regarding Task 1;
- b) the AIS/MAP meeting has been rescheduled to be held in Trinidad and Tobago in the second quarter of 2009; and
- c) COCESNA informed the Meeting on progress related to AIS/MAP (AIM) aspects and development including:
 - RNAV / RNP Procedures, Central American AIP
 - COCESNA AIS Quality Certification
 - Central American AIS Automation
 - e-TOD Seminar
 - AIS/MAP Training
 - Planning of future AIM training

5.1.2 Se invitó a la revisión de las Conclusiones del GREPECAS afines al AIM y a actualizaciones a las tablas AIS del FASID.

5.2 Implementation of e-TOD

5.2.1 The Meeting took note of the need to provide appropriate follow-up to the requirements of ICAO Annex 15, Chapter 10, concerning State provision of electronic terrain and obstacle data within the deadline established in GREPECAS Conclusion 14/40. The Secretariat informed that ICAO is developing a technical co-operation project to develop AIS and MET fields, in accordance with GREPECAS conclusions and Directors General Meetings in the CAR Region. This project is expected to be presented at the NACC/DCA/3 Meeting in September 2008, in Dominican Republic.

5.2.2 The Meeting unanimously considered that an integrated technical co-operation project for the entire CAR Region was highly important in order to assist States with the development and implementation of state-of-the-art air navigation systems for the aerodrome and safety fields in line with the needs of global aviation. The Meeting identified that the project should include:

- a) an analysis to determine CNS/ATM elements required by each involved State/Territory/International Organization;
- b) a study to improve the air navigation services fee collection process; and
- c) the implementation of specific action plans in line with ANP requirements and resolving deficiencies.

5.2.3 Furthermore, considering that there are significant needs in the CAR Region, the Meeting requested that the Secretariat include human resources, training and cost-benefit analysis planning aspects in the technical co-operation project. Likewise, the Meeting considered that participation in the project should be extended to all CAR Region States/Territories as participating members of the project as opposed to individual States/Territories.

Agenda Item 6: AGA Developments and Follow-up

6.1 Follow-up to Activities and Regional Implementation Related to Emergency Plans and Emergency Operations Centres

6.1.1 Information was provided on the Seminar/Workshop on Emergency Plans and Emergency Operations Centres (EOCs) for English speaking States/Territories scheduled for the last quarter of 2008.

6.2 Follow-up to Activities and Implementation Related to Airport Certification and Safety Management Systems (SMS)

6.1.2 The Secretariat informed the Meeting of the minimal reply to surveys on aerodrome certification and safety management systems, and the importance of replying to the surveys for proper analysis by the GREPECAS AGA/AOP/SG urging to complete and submit the information requested to the ICAO NACC Regional Office by **30 August 2008**.

6.3 Follow-up to Activities on the Analysis of Runway End Safety Areas (RESAs) and Runway Strips

6.3.1 The lack of response to the surveys sent to States/Territories on the analysis of runway end safety areas (RESA), and runway strips deficiencies and the importance of responses for proper analysis by the task forces of the AGA/AOP/SG was noted. In this regard, the Meeting urged States/Territories that have not yet replied to the survey to send their information to the ICAO NACC Regional Office.

Agenda Item 7: Terms of Reference and Work Programme

7.1 In view of the foregoing, the Meeting reviewed the NACC/WG terms of reference. It was concluded that tasks and action plans agreed to by the CAR/WG/1 should be incorporated into a single format designated as the NAM/CAR Implementation Plan that will serve as a guide for the North American, Central American and Caribbean working groups. It was also concluded that these groups should continue their own implementation tasks in line with the particular needs of the involved FIRs. The Meeting requested that the Secretariat present this work for approval by the NACC/DCA/3 Meeting. Therefore, ***Draft Conclusion 2/5 – Terms of Reference and Work Programme of the North American, Central American and Caribbean Working Group (NACC/WG) and NAM/CAR Implementation Plan*** was formulated.

Agenda Item 8: Other Air Navigation Matters

8.1 The Secretariat presented information on ICAO electronic tools, which will facilitate the coordination and implementation of regional air navigation plans and support the Global Air Navigation Plan with an electronic version of the Air Navigation Plan (eANP).

8.2 The Meeting recalled the amendment to ICAO Annex 6 (4.3.4.3), which details the implementation of international flight operations without having to include an alternate aerodrome. Currently, several airlines are authorized by their civil aviation authorities to function with no destination alternate airport.

STATUS OF OUTSTANDING CONCLUSIONS AND DECISIONS OF THE CAR/WG/1 MEETING

FIELD	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
GEN	DRAFT CONCLUSION 1/1 IMPLEMENTATION OF AIR NAVIGATION SYSTEMS IN THE CAR REGION That: a) States/Territories/International Organizations develop an action plan as a follow-up to the results of GREPECAS/14, shown in Appendix C to this part of the report; b) the Working Groups of the CAR Region, assisted by ICAO, align its CAR Region planning and implementation work with the ICAO Strategic Objectives, the Global Air Navigation Plan and the Conclusions of GREPECAS; and, c) ICAO assist States/Territories/International Organizations in developing their action plans and examining the terms of reference of the CAR Region working groups.	States/Territories/ International Organizations ICAO	a) In progress by the States/Territories/International Organizations: Valid b) Superseded by Conclusion NACC/WG 2/5. c) The Terms of Reference (TOR) for the NACC/WG were formulated and it is expected that the TORs of the other Subregional Working Groups will be updated accordingly. Superseded by Conclusion NACC/WG/ 2/5.	a) Valid b) and c) Superseded
ATM	DRAFT CONCLUSION 1/2 CREATION OF A CAR ATM TASK FORCE (*) That, based on the existing terms of reference for the different sub-regional working groups (E/CAR, C/CAR, and Central America): a) the ICAO NACC Office organise a CAR ATM Task Force Meeting in early 2008, to develop an ATM Regional Action Plan for a seamless CAR ATM System, based on Appendix A to this part of the Report, to be presented in the next CAR/WG Meeting; and b) States/Territories/International Organizations, nominate their ATM experts to form the ATM Task Force Group of the Caribbean. <i>(*) Members: Cuba, Barbados, Dominican Republic, Haiti, Trinidad y Tabago, United States, IATA, IFATCA. Rapporteur: Fidel Ara (Cuba).</i>	ICAO States/Territories/ International Organizations	Topic and objectives taken into consideration in the structure of the Subregional Working Groups.	Completed
ATM	DRAFT CONCLUSION 1/3 ENDORSEMENT OF WATRS PLUS PROJECT That, a) States/Territories/International Organizations of the CAR Region endorse the WATRS PLUS Project implementation on 5 June 2008; and b) ICAO take the necessary measures to distribute in the NAT and CAR Regions the proposals for amendment of Regional Supplementary Procedures (SUPPs, Doc 7030), for the implementation of 50 NM lateral separation and redesign of ATS routes in WATRS airspace, correspondingly.	States/Territories/ International Organizations ICAO	The Proposal for Amendment was circulated with no State objections. Its approval by ICAO Council is pending.	Completed

APÉNDICE C

FIELD	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
SAR	DRAFT CONCLUSION 1/4 REVIEW OF THE MULTILATERAL SAR AGREEMENT MODEL That: a) ICAO take appropriate action to organise, in <i>early 2008</i> , a CAR SAR Meeting; and b) States, Territories and International Organizations appoint SAR experts to attend Regional CAR SAR Meetings to review the Multilateral SAR Agreement model for the CAR Region, as shown in the Appendix to this Report.	ICAO States/Territories/ International Organizations	The meeting was postponed and ICAO has coordinated a new date for the first semester of 2009.	Valid
CNS	DRAFT CONCLUSION 1/5 PROPOSAL FOR AMENDMENT TO THE FASID TABLE CNS 2A That the ICAO NACC Regional Office forward the corresponding proposal for amendment of the FASID Table CNS 2A – AMS and AMSS related to, a) the relevant requirements to the CAR Region States/Territories, as included in Appendix C to this part of the Report; and b) modify the format of the FASID Table CNS 2A combining all the communication requirements' columns to only one column titled "A/G data".	ICAO	a) Table CNS 2A has been updated and the Proposal for Amendment to the FASID was sent to States for review (Ref. EMX0274, 12 May 2008). b) The modification to the Table has been coordinated with ICAO Headquarters and it will be able to be analysed in the updated electronic ANP; see information paper on eANP.	Completed
CNS	DRAFT CONCLUSION 1/6 PRELIMINARY REGIONAL APPROACH FOR THE IMPLEMENTATION OF THE INTERNET PROTOCOL FOR AMHS That when States/Territories/International Organizations plan and implement their respective AMHS systems, they take into account, in the interim, the <i>"Preliminary Regional approach for the implementation of the Internet Protocol for AMHS,"</i> which is presented in Appendix G to this part of the Report, until the GREPECAS considerations on this topic are issued.	States/Territories/ International Organizations	The States have taken note of this regional approach.	Completed
CNS	DRAFT CONCLUSION 1/7 ESTABLISHMENT AND IMPLEMENTATION OF AN ACTION PLAN FOR THE IMPLEMENTATION OF REQUIRED GROUND-GROUND AND AIR-GROUND VOICE AND DATA COMMUNICATIONS That States/Territories/International Organizations: a) review, complete and implement their respective action plan for the implementation of ground-ground and air-ground voice and data communications, based on the format presented in Appendix H to this part of the Report; and b) forward the Plan mentioned in a) to the ICAO NACC Regional Office no later than 29 February 2008 .	States/Territories/ International Organizations	This Action Plan will be part of the Regional CAR/NAM Implementation Plan. Superseded by Conclusion NACC/WG 2/5 item b).	Superseded

FIELD	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
CNS	DRAFT CONCLUSION 1/8 DEACTIVATION OF NDB STATIONS IN THE EASTERN CARIBBEAN That: a) States/Territories and airspace users should move towards implementing GNSS so that NDB stations can be gradually removed; b) the E/CAR sub-region use the same time line for deactivation of NDB stations based on GREPECAS Conclusion 14/56; and c) 2018 be considered the date for completion of NDB station deactivation by all E/CAR States/Territories.	States/Territories/ International Organizations	The scope of this conclusion was extended to the entire NAM/CAR Regions. Updates are expected from the States/Territories/International Organizations before GREPECAS/15 Meeting.	Valid
CNS	DRAFT CONCLUSION 1/9 E/CAR POINT-OF-CONTACT FOR UPDATING FASID TABLE CNS 3 That: a) Eastern Caribbean States/Territories should provide a point-of-contact for the provision of information for updating FASID Table CNS 3 – Radionavigation Aids Table; b) the ICAO NACC Office send a letter to the E/CAR States/Territories requesting a point-of-contact to be in charge of national coordination to propose amendments to the FASID Table CNS 3 as needed; and c) E/CAR States/Territories send the ICAO NACC Office its proposals for amendment to the FASID Table CNS 3.	States/Territories/ International Organizations ICAO	a) ICAO has received reports from some States regarding their points-of-contact. b) ICAO sent a letter to all CAR Region States/Territories. – Completed c) ICAO has received some responses from States. Agenda Item 3 will follow-up on this action and a new Conclusion will be proposed to amend the FASID. Activities completed.	Completed
CNS TC	DRAFT CONCLUSION 1/10 FOLLOW-UP ON GNSS ACTIVITIES – CYCLE 2007-2008 That the States/Territories/International Organizations: a) follow-up on the GNSS-related SARPs, GNSS related ICAO guidelines and policies, and GREPECAS conclusions; b) review and begin action to continue implementation of GNSS basic services; c) follow-up on regional studies, trials, activities and results of projects RLA/00/009 and RLA/03/902, which are related to the solution for the SBAS implementation and other GNSS augmentation systems.	States/Territories/ International Organizations	The Meeting took note of this follow-up.	Completed
CNS	DRAFT CONCLUSION 1/11 ESTABLISHMENT AND IMPLEMENTATION OF AN ACTION PLAN FOR GNSS IMPLEMENTATION That States/Territories/International Organizations, a) review, complete and implement their respective action plan for GNSS implementation based on the Plan shown in Appendix F to this part of the Report; and b) forward the plan mentioned in a) above to the ICAO NACC Regional Office in order to be received before 29 November 2008 .	States/Territories/ International Organizations	This Action Plan will be part of the Regional CAR/NAM Implementation Plan; superseded by Conclusion NACC/WG 2/5 item b).	Superseded

FIELD	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
CNS	DRAFT CONCLUSION 1/12 ADS-C TRIALS IN THE CAR REGION That Trinidad and Tobago be urged to conduct ADS-C trials with the following tentative programme: i. trials in the Piarco FIR; ii. the data and other results be provided to the ICAO NACC Office to be analysed and coordinated through the GREPECAS CNS/SUR Task Force; and iii. an initial report on the analysis of the trials be presented before 31 July 2008 , in order to enable ICAO and the GREPECAS mechanism to present the results at the GREPECAS/15 Meeting tentatively scheduled for October 2008.	Trinidad and Tobago	A follow-up was conduct and note was taken of Trinidad and Tobago's plans in this respect.	Completed
CNS	DRAFT CONCLUSION 1/13 APPLICATION OF MULTILATERATION SYSTEM AS A SURVEILLANCE OPTION That: a) States/Territories/International Organizations consider multilateration as a viable option to provide immediate surveillance coverage in geographical areas where secondary radar cannot be effectively deployed and in order to provide an effective transition to ADS-B when all aircraft are correctly equipped; and b) Trinidad and Tobago be urged to conduct trials in multilateration along similar guidelines used for the ADS-C trials as a transition path to ADS-B in the medium term.	States/Territories/ International Organizations Trinidad and Tobago	a) A follow-up was conducted and note was taken that multilateration was contained in the new version of the GREPECAS Regional Unified Surveillance Systems Strategy. b) Note was taken of Trinidad and Tobago's plans in this respect.	Completed
CNS	DRAFT CONCLUSION 1/14 ADS-B TRIALS To urge: a) Cuba to continue its ADS-B trials in the Havana FIR; b) Trinidad and Tobago and the United States to establish and implement an ADS-B trials project in the Piarco FIR; c) States/Territories/International Organizations from the CAR region be invited to participate in the Project mentioned in b) above, expanding the trials in other airspace and follow-up on the execution and results of the projects mentioned in a) and b), as well as other initiatives; and d) all States/Territories/International Organizations who conduct trials and other ADS-B related activities, inform the ICAO NACC Office before 31 July 2008 , on the status of implementation and results of their activities to facilitate analysis and coordination through the GREPECAS CNS/SUR Task Force.	Cuba Trinidad and Tobago States/Territories/ International Organizations	A follow-up was conducted and note was taken of the States/Territories/International Organization plans in this respect.	Completed

FIELD	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
CNS	<p>DRAFT CONCLUSION 1/15 ESTABLISHMENT AND IMPLEMENTATION OF AN ACTION PLAN FOR SURVEILLANCE SYSTEMS IMPLEMENTATION</p> <p>That States/Territories/International Organizations:</p> <p>a) review, complete the information and execute their corresponding action plan for implementation of surveillance systems, considering Appendix P to this part of the Report; and</p> <p>b) forward the plan mentioned in a) above to the ICAO NACC Regional Office for receipt before 29 February 2008.</p>	States/Territories/ International Organizations	This Action Plan will become part of the Regional NAM/CAR Implementation Plan; superseded by Conclusion NACC/WG 2/5 item b).	Superseded
CNS	<p>DRAFT CONCLUSION 1/16 FINALISING THE REGIONAL PREPARATION AND SUPPORT TO THE UPDATED ICAO POSITION FOR THE WRC-2007</p> <p>States and International Organizations:</p> <p>a) are urged to take note of the updated ICAO position for the WRC-2007 presented in Appendix Q and incorporate it into the positions of their own administrations who will participate at the WRC-2007;</p> <p>b) who are CITEL Member States are urged to participate in the preparation of common inter-American positions for the WRC-2007, which is being developed by CITEL's Permanent Consultative Committee (CCP.II), supporting the updated ICAO position for the WRC-2007; and</p> <p>c) are urged to participate in the WRC-2007 in order to support the updated ICAO position in order to guarantee the availability and protection of the aeronautical radio frequency spectrum, which is essential to meet civil aviation demands in a safe, efficient and cost-effective manner.</p>	States/ International Organizations	The results of the WRC-2007 and States' support for the ICAO position for the WRC-2007 were informed.	Completed
ATM	<p>DRAFT CONCLUSION 1/17 ESTABLISHMENT OF AN ACTION PLAN FOR INTERFACE IMPLEMENTATION TO ESTABLISH ATM AUTOMATED SYSTEMS AMONG ATS ADJACENT UNITS</p> <p>That States/Territories/International Organizations:</p> <p>a) review, complete and execute their respective action plan for interface implementation to establish ATM automated systems between adjacent units utilising Appendix C to this part of the Report; and</p> <p>b) forward the plan mentioned in a) above to the ICAO NACC Regional Office by 29 February 2007.</p>	States/Territories/ International Organizations	This Action Plan will become part of the Regional NAM/CAR Implementation Plan; superseded by Conclusion NACC/WG 2/5 item b).	Superseded

FIELD	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
AIM	<p>DRAFT CONCLUSION 1/18 IMPLEMENTATION OF AN AIS/MAP AIM ACTION PLAN AND PARTICIPATION OF OFFICERS IN THE SEMINAR ON TERRAIN AND OBSTACLES ELECTRONIC DATA (e-TOD) AND THE FOLLOW-UP MEETING</p> <p>That States/Territories/International Organizations,</p> <p>a) follow-up and execute the AIS/MAP-AIM Action Plan presented in Appendix B to this part of the Report, and inform the ICAO NACC Regional Office on the results of implementation of their respective tasks by 27 September 2007;</p> <p>b) consider the designation and participation of AIS/MAP officers in the Seminar on Terrain and Obstacles Electronic Data (e-TOD), and in the combined AIS follow-up Meeting in their training plans scheduled as a first alternative in the Dominican Republic the week of 22 October 2007; and</p> <p>c) the ICAO Regional Office consider as a second option to hold the combined Seminar/Meeting in Trinidad and Tobago in the second trimester of 2008, in view of the importance to provide support for the implementation of the ATM system.</p>	States/Territories/ International Organizations	This Draft Conclusion was considered finalized with the SIP e-Tod Seminar held in Santo Domingo, Dominican Republic.	Completed

STATUS OF OUTSTANDING CONCLUSIONS AND DECISIONS OF THE NACC/WG/2 MEETING

FIELD	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
ATM	DRAFT CONCLUSION 2/1 ADOPTION OF A NAM/CAR ATFM OPERATIONAL PROCEDURES HANDBOOK That CAR and NAM States/Territories/International Organizations, when implementing ATFM service, use the NAM/CAR ATFM Operations Plan included in Appendix C to this part of the report.	States/ Territories/ International Organizations	States/Territories/International Organizations are expected to take note of this Manual in the Planning and implementation of ATFM activities: Deadline: Last quarter of 2009.	Valid
SAR	DRAFT CONCLUSION 2/2 DEVELOPMENT OF NATIONAL SAR SERVICES QUALITY ASSURANCE PROGRAMME That NAM/CAR States/Territories/International Organizations develop a SAR Quality Assurance Handbook, taking into consideration the questionnaire shown in Appendix D to this part of the report, in order to establish a National SAR Services Quality Assurance Programme by 30 August 2009.	States/ Territories/ International Organizations	The SAR Quality Assurance Handbook should be developed by 30 August 2009.	Valid
ATM/ MET	DRAFT CONCLUSION 2/3 IMPLEMENTATION OF ADDITIONAL COORDINATION PROCEDURES FOR HURRICANES AND VOLCANIC ASH That NAM/CAR States/Territories/International Organizations attach the additional coordination procedures for hurricanes and volcanic ash included in Appendix E to this part of the report to their respective ATS contingency plans, and disseminate these procedures among pilots and controllers to achieve homogeneous application during these natural disasters.	States/ Territories/ International Organizations	a) update of the corresponding ATS contingency plans with hurricane and volcanic ash coordination procedures included in Appendix E to the Report of the NACC/WG/2 Meeting (Deadline: August 2009) b) disseminate these procedures among pilots and controllers accordingly, for the homogeneous application during these natural events (Deadline: December 2009)	Valid

FIELD	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
ATM	<p>DRAFT CONCLUSION 2/4</p> <p>ACTIONS TO AVOID DUPLICATION OF FLIGHT PLANS</p> <p>That:</p> <p>a) NAM/CAR States, Territories and International Organizations take appropriate actions in the short term to:</p> <ul style="list-style-type: none"> i) publish the proper address in the AIP for destination of filed flight plans; ii) urge operators to avoid duplication of CPL and/or RPL messages, noting that only one should be in force for a specific flight plan; iii) establish timelines for coordination of filed flight plans and updating related changes; iv) follow-up national provisions for FPL acceptance in accordance with ICAO Doc 4444 for flights operating from one FIR to another adjacent FIR; v) initiate interface coordination between ATS automated systems in accordance with the Interface Control Document for Data Communications between ATS Units (ICD) approved by GREPECAS; vi) ensure that dispatch offices have a sufficient number of qualified specialists for proper coordination and flight plans follow-up; and vii) take appropriate measures to ensure that the flight plan be sent officially. <p>b) operators carry out proper coordination of filed flight plans to ensure that only one is in force.</p>	<p>a) States/ Territories/ International Organizations</p> <p>b) Operators and Flight Plan users</p>	<p>a) NAM/CAR States, Territories and International Organizations need to take action no later than 28 November 2008</p> <p>b) operators have to coordinate their flight plans with States, Territories and International Organizations to ensure that only one is valid</p> <p>Deadline: February 2009</p>	Valid

FIELD	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
GEN	<p>DRAFT CONCLUSION 2/5</p> <p>TERMS OF REFERENCE AND WORK PROGRAMME OF THE NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN WORKING GROUP (NACC/WG) AND NAM/CAR IMPLEMENTATION PLAN</p> <p>That:</p> <p>a) the Central Caribbean (C/CAR WG), Eastern Caribbean (E/CAR WG), Central American Air Navigation Experts (CA/ANE/WG) and Canada, Mexico and United States (CAN/MEX/USA) Working Groups, when developing and reviewing their work programmes, take into account the NACC/WG Terms of Reference and Work Programme and NAM/CAR Implementation Plan, respectively, included in Appendices A and B to this part of the report;</p> <p>b) NAM/CAR States/Territories develop their national action plans based on the NAM/CAR Implementation Plan to achieve harmonized interregional implementation; and</p> <p>c) ICAO take appropriate measures to monitor the implementation of the NAM/CAR Implementation Plan and submit NACC/WG progress reports to the NACC/DCA Meetings.</p>	<p>a) Subregional Working Groups</p> <p>b) States/ Territories/ International Organizations</p> <p>c) ICAO</p>	<p>a) Update work programme and terms of reference of each subregional working group Deadline: June 2009</p> <p>b) National Plans Proposed Deadline: August 2009</p> <p>c) Monitoring of implementation plans Deadline for the first report: July 2009</p>	Valid

APPENDIX D

TERMS OF REFERENCE OF THE NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN WORKING GROUP (NACC/WG)

1. Terms of Reference

- a) promote development of the CAR/SAM and NAM Air Navigation Plans and other relevant regional documentation, in compliance with ICAO SARPs, as required;
- b) facilitate the implementation of air navigation systems and services as identified in the CAR/SAM and NAM Air Navigation Plans;
- c) address emerging aviation issues focusing on continued improvements to operational efficiency through enhanced coordination, harmonised procedures, interoperability of networks and implementation of new technologies;
- d) promote implementation initiatives and associated technologies to improve safety, increase operational and economic efficiency and/or capacity of regional Air Navigation Services (ANS);
- e) harmonise implementation of performance objectives related to ANS with regard to the GPIs of Doc 9750;
- f) enhance airspace organisation and management (AOM) structure through the improvement of ATS/RNAV routes and/or tracks with entry/exit points on Flight Information Region (FIR) boundaries;
- g) develop air traffic flow management (ATFM) procedures designed to improve efficiency and economy, increase capacity, and overcome existing limitations;
- h) share information on implementation initiatives for enhancing compatibility of air traffic operations;
- i) support the implementation initiatives associated with ICAO's strategic objectives; and
- j) recommend to the NAM/CAR Directors General initiatives to the NAM/CAR Regional Implementation Plan and any necessary steps for implementation.

2. Work Programme

- a) review and recommend deadlines for implementation of facilities, services and procedures to improve ANS in the CAR/NAM Regions;
- b) develop guidelines and make recommendations for States/Territories/International Organizations to implement their ANS national plans;

- c) make recommendations to prepare proposal for amendments to the Doc 7030 and Doc 8733 to satisfy ANS expectations and requirements;
- d) monitor the implementation of air navigation facilities and services to ensure interregional harmonization, taking due account of performance measurements, environmental benefits and operational issues;
- e) provide recommendations to improve human resources planning and development in line with ICAO guidelines;
- f) promote close cooperation between States, Territories and International Organizations and users to optimize the use of available expertise and resources;
- g) conduct activities in the most efficient manner with a minimum of formality and documentation, using electronic tools and telephone conferences to ensure complete exchange of information, when required;
- h) associate in a logical manner the implementation of initiatives with the seven components of Doc 9854, (AOM, DCB, AO, TS, CM, AUO ATMSDM) as appropriate;
- i) avoid duplication of work; and
- j) quantify cost/benefit analysis in terms of performance measures, deadlines, responsible body for implementation and results as well as human factors performance;

3. **Membership**

All ICAO Contracting States, Territories and International Organizations which are accredited to the ICAO NACC Regional Office and Colombia shall be members of the NACC/WG. Other States adjacent to the CAR and NAM Regions may be invited to participate in the NACC WG.

4. **Working Methods**

- a) the Chairperson of the NACC/WG will be a representative from the host State/Territory/International Organization for the duration of the Meeting;
- b) at the beginning of each Meeting, a Vice-Chairperson will be elected for the duration of the Meeting; and
- c) the Members of the NACC/WG will conduct coordination of works as follows:
 - via written correspondence, i.e. e-mail, fax, etc.
 - via phone and teleconference calls;
- d) meetings will be convened every three years or when necessary;

5. Meeting Sites

- a) the ICAO NACC Regional Office will convene the NACC/WG Meeting at least six months before holding it;
- b) the NACC/WG will meet in accordance with the following rotational scheme: Central America, North America, Eastern Caribbean (E/CAR) and Central Caribbean (C/CAR); and
- c) any member States/Territory/International Organizations may, at any time, offer to host a NACC/WG meeting.
