



ICAO

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North American, Central American and Caribbean Office

WORKING PAPER

E/CAR/CATG/3 — WP/20
12/10/16

Third Eastern Caribbean Civil Aviation Technical Group Meeting (E/CAR/CATG/3)
Basseterre, Saint Kitts and Nevis, 19 to 21 October 2016

Agenda Item 3: Air Navigation Matters
3.4 E/CAR/CATG contribution to ANI/WG/03 Meeting

IMPLEMENTATION UPDATES ON ECAR/CATG ACTIVITIES PROVIDED IN 2016

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
<p>This working paper recalls the updates and follow-up given to the ANI/WG/3 (2016) and E/CAR/DCA/26 (2015) Meetings regarding the E/CAR/CATG air navigation implementation activities and suggest the revision and improvement to the ICAO website dedicated to the group.</p>	
Action:	Review the updates given in the different meetings as detailed in Appendices A and B . Also please review and identify improvement to the ICAO NACC E/CAR/CATG website as needed.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Environmental Protection
<i>References:</i>	<ul style="list-style-type: none">• ICAO NACC E/CAR/CATG website: http://www2010.icao.int/NACC/Pages/nacc-regionalgroups-ecarcats.aspx• Third NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/3), Mexico City, Mexico, 4 to 6 April 2016• Sixth Meeting of the North American, Central American and Caribbean Directors of Civil Aviation, Nassau, Bahamas, 10-12 May 2016

Relevant report by ECARCATG to ECARDCA26 Meeting:

6.3.2 E/CAR/CATG/2 Meeting

6.3.2.1 Under WP/11, the E/CAR/CATG Chairperson provided an overview of the results of the Second E/CAR Civil Aviation Technical Group Meeting, including the implementation progress achieved to-date. The Meeting noted the recently elected E/CAR/CATG Chairperson Mrs. Shenneth Phillip from Antigua and Barbuda and congratulated the Group.

6.3.2.2 Similarly, the Meeting noted that the E/CAR/CATG/2 Meeting had agreed to support the Second NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/2) Conclusions as detailed under WP/11. The progress achieved by each one of the E/CAR/CATG Committees was explained, highlighting the following:

- a) ATM Committee:
 - Review of Air Traffic Service(s) (ATS) coordination activities between VC Bird APP, Princess Juliana APP, San Juan CERAP and PIARCO ACC
 - Updates to the Caribbean and North Atlantic Regional Supplementary Procedures (Doc 7030)
 - Review of ATS LOAs
 - Operational use of CPDLC and ADS-C in the E/CAR area
 - Operational assistance for Argyle Airport Commissioning in Saint Vincent and the Grenadines

- b) AIM Committee
 - Implementation of a PIARCO AIS/NOTAM Contingency Plan
 - the group will work towards implementation of a Quality Management System (QMS) for AIS in the Eastern Caribbean
 - The Central Flight Planning Unit is scheduled to be implemented early 2016

- c) AGA Committee
 - Within the E/CAR, only 20 of the 34 (59%) international aerodromes are certified
 - OECS should ensure that regulatory framework be established to allow for certification in accordance with Annex 14 - *Aerodromes*
 - Two of the critical safety issues associated with aerodrome operations continue to be Runway Excursions (RE) and Runway Incursions (RI). Trinidad and Tobago has a functioning Runway Safety Team (RST). In this regard, all E/CAR States are urged to establish RSTs.

- d) MET activities: Contact has been established with the Caribbean Meteorological Organization (CMO). Actions and procedure still to be agreed.

- e) The progress of the CNS and SAR Committees were presented in WP/12 and WP/27 respectively.

6.3.2.3 Considering the existing support of runway safety matters from ACI, RASG-PA and United States, the Meeting agreed to consolidate these efforts with the E/CAR/CATG AGA Committee and formulated the following conclusion:

CONCLUSION**E/CAR/DCA/26/06 CONSOLIDATION OF EFFORTS TO SUPPORT RUNWAY SAFETY IMPLEMENTATION**

That, considering the existence of various organizations supporting runway safety implementation, such as ACI, RASG-PA and United States, and in order to consolidate these efforts in the E/CAR States, the ICAO NACC Regional Office:

- a) coordinate a teleconference with ACI, RASG-PA, United States, the E/CAR/CATG AGA Committee Rapporteur and the E/CAR States before **end of January 2016**; and
- b) inform the E/CAR States on the results of this task and the subsequent assistance actions taken to the E/CAR/DCA/27 Meeting.

6.3.2.4 After the review of the E/CAR/CATG activities, the Meeting recognized the need for all E/CAR States/Territories to actively participate in the AGA and SAR implementation activities, and commented on the need to optimizing the structure of the E/CAR/CATG particularly for these two fields. The Meeting will conclude on the optimization of the E/CAR/CATG SAR and AGA Committees after receiving the next E/CAR/CATG/03 meeting results and recommendations formulated by the E/CAR/CATG.

6.3.2.5 Similarly, the Meeting noted the ongoing coordination between the CMO and the E/CAR/CATG on aeronautical meteorological activities. E/CAR States and Territories were urged to participate in the air navigation implementation activities led by the E/CAR/CATG.

6.3.2.6 WP/26 complemented the information provided by the E/CAR/CATG Chairperson with the achievements on the implementation of the Single E/CAR AIM Quality Management System (QMS), PIARCO NOTAM/AIS Contingency Plan and Filed Flight Plan (FPL) Error Resolution in the E/CAR area; highlighting:

- The agreement to implement a single AIM QMS certification for the Eastern Caribbean: Information and documentation has been exchanged and the fourth quarter of 2016 is anticipated for ISO 9001 2008 certification of their AIM QMS. In addition, Trinidad and Tobago is currently awaiting comments on a proposed amendment to the existing (LoAs), which have been prepared to reflect the inclusion of AIM QMS requirements
- The AIM Committee has convened a meeting to be hosted by Antigua and Barbuda from 2 to 4 March 2016 in order to develop action plans to assist States in meeting the POS targets, discuss proposed changes to the AIM LOAs in relation to the implementation of AIM QMS requirements; and review NOTAM, flight planning and Meteorology (MET) filing procedures
- The Meeting was informed of the PIARCO NOTAM/AIS Contingency Plan that will be implemented in accordance with the agreement between the Directors General of Trinidad and Tobago Civil Aviation Authority (TCAA) and the Dutch Caribbean Air Navigation Service Provider (DC-ANSP) signed in 29 April 2014. The operational readiness demonstration of this implementation is expected for July 2016 and commissioning and full operation by the end of the third quarter 2016

- The results on the resolution of missing/duplicate and erroneous flight plans: E/CAR participated in a data collection and analysis activity from 13 September to 4 October 2015. Similarly, the progress on the implementation of the centralized FPL system was provided.

6.3.2.7 In this regard the Meeting approved the following conclusion:

CONCLUSION

E/CAR/DCA/26/07

E/CAR AIM IMPLEMENTATION MEETING

That, in order to support and expedite the implementation of AIM matters in the E/CAR area, including the activities for phase 1 of the AIM implementation and the PIARCO NOTAM/AIS Contingency Plan actions:

- a) E/CAR States and Territories designate their corresponding AIM experts/participants to the E/CAR AIM Meeting to be held in Antigua and Barbuda in March 2016; and
- b) Antigua and Barbuda cover the expenses of the participation of ICAO for their attendance and support to this meeting.

6.3.2.8 WP/27 presented the progress made by the E/CAR/CATG SAR Committee on the activities and development of an E/CAR Aviation Contingency Plan. The Meeting was informed that this Committee has engaged E/CAR States/Territories/International organizations in an effort to improve SAR services as follows:

- Trinidad and Tobago has created the Aeronautical SAR and Air Navigation Security (A-SAR and AN-SEC) Unit. The Unit is mandated to support the E/CAR Aviation Contingency Plan through preparedness, mitigation, response and recovery from emergencies. The A-SAR and AN-SEC Unit plans to outfit its Aeronautical Rescue Coordination Center (ARCC) and AN-SEC Operations Room by January 2016
- Trinidad and Tobago has developed an Aeronautical Search and Rescue (A-SAR) Operators Course. This course would be used to certify current Air Traffic Controllers as Aeronautical Search and Rescue Operators to function within the ARCC PIARCO. The first A-SAR Operators Course will begin in January 2016 with the expectation to have the A-SAR and AN-SEC Unit staffed 24/7 by April 2016
- A proposal was made for the implementation of a supplement communications means (a hotline) for emergency situations through the Multiprotocol Label Switching (MPLS) system to connect the E/CAR States to the PIARCO ARCC
- The E/CAR/CATG SAR Committee has held four webinars in October 2013, September 2014, May 2015 and November 2015. States are encouraged to ensure active participation in upcoming teleconferences, webinars and meetings
- The E/CAR/CATG SAR Committee conducted an operational visit/meeting with the United States Coast Guard, in San Juan, Puerto Rico on March 18-19, 2015
- The E/CAR/CATG SAR Committee attended several NAM/CAR/SAM Meetings/workshops as well as a Search and Rescue (SAR) exercise in Martinique on 12 November 2014, where valuable learnings were received and a draft LoA between Martinique and Trinidad and Tobago for Aeronautical SAR operations within the PIARCO FIR was submitted to Martinique for review

- The E/CAR/CATG SAR Committee participated in the Trinidad and Tobago Search and Rescue Region Working Group (TTSRR/WG), where it concluded on States developing National Plans and Regional Plans; and a Multilateral Agreement is before the relevant States for signatures after which the Working Group shall continue its SAR efforts as a formalized committee.

6.3.2.9 The Meeting recognized that the E/CAR/CATG SAR Committee continues to be challenged with the lack of State participation in the development of their activities and the E/CAR Aviation Contingency Plan. In this regard the following conclusion was formulated:

CONCLUSION

E/CAR/DCA/26/08 SAR POCS FOR SAR IMPROVEMENTS AND DEVELOPMENT OF THE E/CAR NATURAL DISASTER EMERGENCY PLAN

That, in order to ensure the appropriate participation and involvement of the necessary parties for the implementation of SAR improvements in the E/CAR area, as well as the completion of the E/CAR Natural Disaster Emergency Plan:

- a) ICAO, in coordination with the E/CAR/CATG SAR Committee Rapporteur, submit a letter by **15 January 2016** to the E/CAR States requesting the PoCs from the State, SAR executing bodies and any other involved entity necessary for the SAR improvements and E/CAR Natural Disaster Emergency Plan; and
- b) the E/CAR/CATG SAR Committee coordinate the different supports on SAR training and trial events and inform of an Action Plan for these improvements and the E/CAR Natural Disaster Emergency Plan by the E/CARDCA/27 Meeting.

6.3.2.10 Under WP/28 and P05, the Meeting was informed on the progress made by the NAM/CAR ANIWG PBN Task Force (TF) applicable to the E/CAR area. The Meeting was recalled that the E/CAR CATG/2 Meeting decided that the issues related to PBN implementation within the E/CAR area shall be handled under the NAM/CAR ANI/WG PBN TF and reported to the ATM Committee. Under this progress, the following was highlighted:

- a) The results of the 2014 PBN survey concluded in many deficient areas that the PBN TF is resolving for PBN implementation. This information was complemented with the results accomplished from the 2015 PBN survey as presented in **Appendix C** to this report
- b) The Workshop on Regional Implementation on Performance-Based Navigation (PBN) Airspace Redesign for the CAR Region, 4 to 8 May 2015, provided a platform for discussion between adjacent States/Territories and Organizations on airspace harmonization
- c) Trinidad and Tobago submitted a PBN Airspace Redesign Concept for the PIARCO FIR (Eastern Caribbean area) to the ICAO NACC Regional Office on 29 March 2015. Trinidad and Tobago advised that States/Territories/Organizations which had not already developed an airspace concept aligned with the PBN Concept for the area were free to use the document as a template for their own plans
- d) One of the major issues identified is the lack of expertise and training in PBN related matters. TF members were asked to contribute with any material they are authorized to share so that others may learn from it: NAV Canada provided PBN operational material, CANSO provided a PBN “Best Practices” document; and during the PBN Workshop held in Trinidad and Tobago,

from 19 to 22 November 2015, United States distributed detailed training plans used by the FAA for training Air Traffic Controllers on PBN

- e) Trinidad and Tobago continues to provide technical assistance to the E/CAR States and Territories in the form of teleconferences, discussions/feedback on airspace plans, hosting of workshops and distribution of technical material etc.
- f) In 2014 and 2015, States and Territories were invited to participate in both PBN and ATFM ICAO Go TEAM Missions to Trinidad and Tobago, for knowledge and to obtain hands-on experience
- g) Trinidad and Tobago held several teleconferences with Brazil, Guyana, Suriname, United States (Miami FIR, San Juan FIR, New York FIR), CANSO, IATA and ICAO on plans for a re-design of the upper airspace routes that flow between North and South America, through the E/CAR area
- h) The CAR and SAM FIRs are coordinating with each other to accept IATA's proposal of 40 NM longitudinal separation (utilizing Global Navigation Satellite System (GNSS) crossing their common boundaries. An airspace meeting is tentatively scheduled for 2016
- i) The benefits of PBN implementation are maximised by ATFM, as concluded from the ATFM/CDM workshop, 16 – 18 November 2015, and PBN Workshop, 19 - 22 November 2015. These workshops highlighted:

- The need for Data sharing agreement amongst E/CAR States/Territories and adjacent FIRs
- The need for coordination/harmonization of airspace/route designs and separation standards with adjacent units, including those outside of the PIARCO FIR
- Lack of resources (funding, human resources) to adequately pursue implementation of ATFM and PBN initiatives
- Lack of the Collaborative Decision Making (CDM) process with critical stakeholders (airspace users, aerodrome operators, regulatory bodies, MET etc.) in developing State Air Navigation Plans
- Ineffective communication means for E/CAR discussion on ATM issues were identified

6.3.2.11 The Secretariat recalled the RLA/09/801 Project support through PBN TEAMS, fellowships and Subject Matter Experts (SMEs) for conducting the PBN ATS Route Planning/Airspace Design meetings for consideration of the PBN TF.

6.3.2.12 The Meeting recognized the new approach for PBN implementation, the joint work with IATA for this purpose, and that E/CAR States/Territories should send their preliminary working/draft airspace concept plans to the ATM Committee Rapporteur by 20 January 2016, in order to be considered in the Airspace Design meeting scheduled for first quarter of 2016. In this regard the Meeting agreed on the following conclusion:

CONCLUSION

E/CAR/DCA/26/09

CONSOLIDATED PBN ATS ROUTE REVIEW IMPLEMENTATION MEETING

That, in order to support and ensure full participation of the Administrations involved in the review of the PBN ATS routes for the E/CAR area, IATA, ICAO and the ANI/WG PBN TF Rapporteur coordinate the Meeting to be hosted by IATA in the first half of 2016, agreeing and timely submitting the corresponding invitation to the States/ANSPs involved by **8 January 2016**.

6.3.2.13 Under IP/12, the Meeting took note of the activities on ATFM implementation conducted by Trinidad and Tobago in the PIARCO FIR.

6.3.3 E/CAR Communications Network Performance and Radar Data Sharing Implementation

6.3.3.1 Under WP/12, the E/CAR/NTG Rapporteur provided an overview of a) the surveillance data sharing activities achieved; b) an update to the surveillance implementation plan; and c) the Eastern Caribbean (E/CAR) Aeronautical Fixed Services (AFS) Network. From this overview the following was highlighted:

- The French Civil Aviation has donated and installed eleven computers (IRMA) as part of the Implementation of Radar Data Display Phase 1. The E/CAR users that implemented these displays have provided very positive replies on the performance and usefulness of this equipment, allowing a significant enhancement of situational awareness in their corresponding ATS airspaces
- The Implementation Plan was updated based on the recent events on radar data sharing matters, and with the actions for radar data exchange with the adjacent FIRs as part of the process to enhance the (Multi-Radar Tracking) MRT data for E/CAR users (San Juan, Sint Maarten) and Venezuela. Similarly, the E/CAR Radar Data Sharing (RDS) participants recognized the need to confirm the commitment of the States for Phase II of the implementation for the tender and acquisition of the final radar displays, so the following revised milestones are presented in the Implementation Plan as follows:
 - Integration of Barbados Radar: January - March 2016
 - Integration of Antigua and Barbuda Radar: June - December 2016
 - Integration of Sint Maarten Radar: January - October 2016
 - Evaluation of integrating United States radars: January-August 2016
 - Other radar integration (Venezuela): December 2015 - December 2017
 - ECAR Radar Display Acquisition Tender - preparation of Request For Proposal (RFP): February - March 2016
 - E/CAR Radar Display (RD) Tender- process: March – April 2016
 - E/CAR RD implementation: July - December 2016
 - Preparation for ADS-B trials: October 2015 - November 2016
- Regarding the E/CAR AFS Network Performance, E/CAR users agreed that the network was globally compliant with consistently good performance and availability. Feedback on faults has been excellent, which has provided a high level of confidence in the network. The new dedicated MEVA telecommunications network circuit required for radar exchange between San Juan and Sint Maarten, and the voice circuits to Anguilla, Antigua and Saint Kitts and Nevis are already installed. The configuration of the E/CAR/AFS router in San Juan is completed and now operating

6.3.3.2 In this regard, the Meeting congratulated the effective work of the E/CARNTG Group on the Network improvements and performance, and the implementation of Phase I of the Radar Data Display. It concluded that the E/CAR/NTG has fulfilled its work as mandated by the E/CAR DCAs and therefore, agreed to keep the ECARNTG just for the next meeting in 2016, passing its Network functions

to the E/CAR CNS Committee. Similarly, the Meeting formulated the following conclusion for the Phase II of the radar data Display implementation:

CONCLUSION

E/CAR/DCA/26/10 APPROVAL OF E/CAR RADAR DATA SHARING IMPLEMENTATION PLAN- PHASE II

That, considering the achievement of the Phase I of the E/CAR Radar Data Sharing and an appropriate time for the States to become familiarized with the Phase I Radar display:

- a) ECCAA, as representative of the participating OECS States in the Radar Data Sharing activities, confirm its commitment for Phase II providing the necessary users' requirements by **31 January 2016**; and
- b) the E/CAR/DCA approve the E/CAR Radar Data Sharing Phase II Implementation Plan as presented in the Appendix of WP/12.

Relevant ECARCATG implementation progress report to ANI/WG/03 Meeting

4.1.58 IP/02, presented by the Eastern Caribbean Civil Aviation Technical Group Management (E/CAR/CATG) Chairperson, informed on the activities of the Aeronautical Information Management (AIM), Air Traffic Management (ATM) and Communications Navigation and Surveillance (CNS) Committees of the E/CAR/CATG since the Second NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/2) and the E/CAR/CATG/2 Meeting.

4.1.59 The main activities reported by the AIM Committee are summarised as follows:

- a) the effort for the implementation of a PIARCO AIS/NOTAM Contingency Plan, which could use the IDS North America NOTAM software called SPATIA, once a proposal is analysed by Trinidad and Tobago Civil Aviation Authority (TTCAA) CNS and AIM departments. The Directorate of the TTCAA is committed to achieving this goal, expecting results through 2016; and
- b) in relation with the implementation of a Quality Management System (QMS) for Aeronautical Information Service (AIS) in the Eastern Caribbean (E/CAR) the AIM Committee decided to adopt COCESNA is model of a single harmonized QMS for the E/CAR. To this end, an AIM QMS workshop was conducted in Antigua and Barbuda from 14 to 18 March 2016.

4.1.60 To enhance the knowledge and understanding of participants on the requirements of a QMS that complies with the ISO 9000, the Central Flight Planning Unit will be deployed during the second Quarter of 2016, in order to instituting a single AFTN address for the PIARCO FIR and to centralise flight planning.

— END —