

# NAMCAR ANIWG PBN TASKFORCE REPORT

WP - 28

E/CAR DCA 26 Meeting  
New Orleans, United States  
Dec 1 - 3. 2015



## Summary

This working paper presents the updated progress report of the NAMCAR ANI/WG PBN Taskforce taking into consideration its work programme and its applicability to the ECAR Region and the follow-up activities emanating from ANI/WG/2 and CATG/2 conclusions



## Following CATG 2

- To avoid duplication of work - E/CAR States/Territories that have not already done so, should join the NAM/CAR ANIWG PBN Taskforce
- Participation on Teleconferences is encouraged
- Formation of E/CAR Airspace Concept Design Subgroup under the ATM Committee.



# PBN Survey

- Poor response to 2014 PBN Survey
- Updated PBN survey, EMX 0654, dated 14 July 2015, was promulgated by the ICAO NACC Office with the intention of acquiring information from those States/Territories which did not respond to the first survey as well as receiving updated information from those which had.
- Ineffective implementation
  - Lack of Financial and Human Resources
  - Some PBN upper airspace routes mimic old legacy routes
  - IFPs poorly designed and in some cases, unusable
  - Poorly designed airspace volumes
  - Lack of coordination with ALL stakeholders



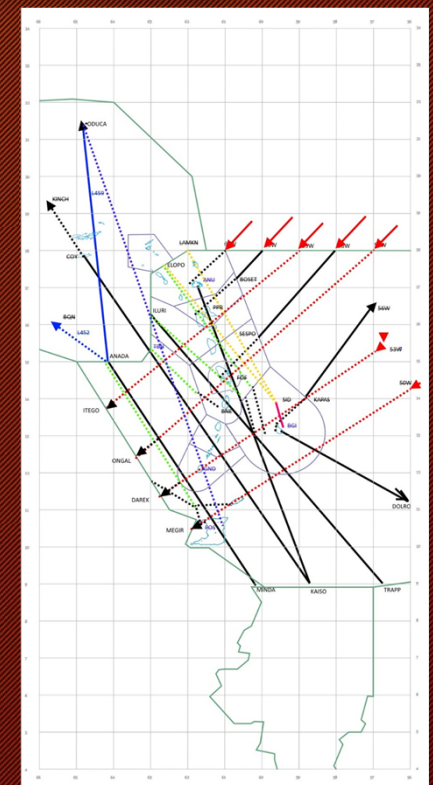
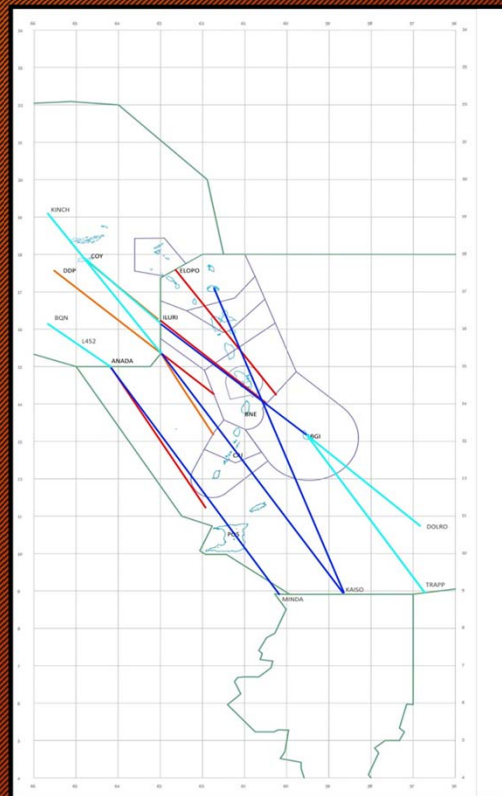
# Piarco FIR Airspace Re-design concept

- Submitted to ICAO in March 2015
- Promulgated to :
  - All NACC States/Territories
  - SAM ATM RO
  - Suriname, Guyana, Brazil
  - IATA and CANSO
- E/CAR TMAs were encouraged to use it as a template for their own airspace concept and to provide Trinidad and Tobago with their conceptual designs





# Piarco FIR Airspace Concept Redesign





# Training

- One of the major issues identified is the lack of expertise and training in :
  - PBN implementation planning
  - Airspace designers
  - IFP Designers
  - Conducting required safety study
  - ATCO Training
- Through PBN TF States/Territories and Organizations were asked to share training material, implementation plans etc.
- Canada and CANSO shared valuable information in PBN implementation planning
- United States distributed detailed training plans used by the FAA for training Air Traffic Controllers on PBN



# Technical assistance to E/CAR from Trinidad and Tobago

- PBN workshop conducted in Barbados March 2013
- ANS Team visit to Saint Vincent 2014
- Open commitment from Trinidad and Tobago to visit an OECS State to conduct workshop on PBN implementation
- Invitation to E/CAR States/Territories to attend both ICAO PBN and ATFM GO-TEAM meetings to Trinidad and Tobago
- Teleconferences (ATM Committee and ATFM/PBN Taskforce)
- Discussion on airspace plans
- Trinidad and Tobago hosted an ATFM/CDM workshop, 16 - 18 November 2015, followed by a PBN workshop, 19 - 22 November 2015



## Issues identified

- 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 CDM process with critical stakeholders (Airspace users, Aerodrome Operators, Regulatory bodies, MET etc.) in developing State Air Navigation Plans
- Ineffective medium for E/CAR Regional discussion on ATM issues

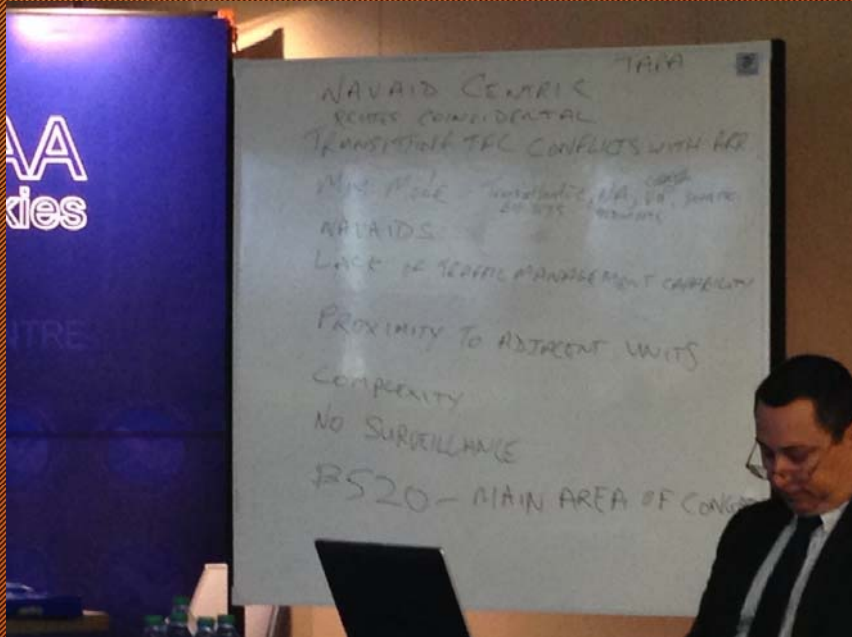


# Results of PBN Workshop

- Formation of an E/CAR PBN Airspace Concept Subgroup of the ATM Committee
- Participants were able to sit and collaborate conceptual airspace designs with adjacent TMAs and Trinidad and Tobago
- Some design issues were cleared up between Barbados, Martinique and Trinidad and Tobago
- Participants were able to discuss modifications to LOAs
- Participants received hands-on experience in following the recommended steps for Airspace Concept Design
- Trinidad and Tobago is considering to host yearly Stakeholder meetings regarding the ANP for the Piarco FIR

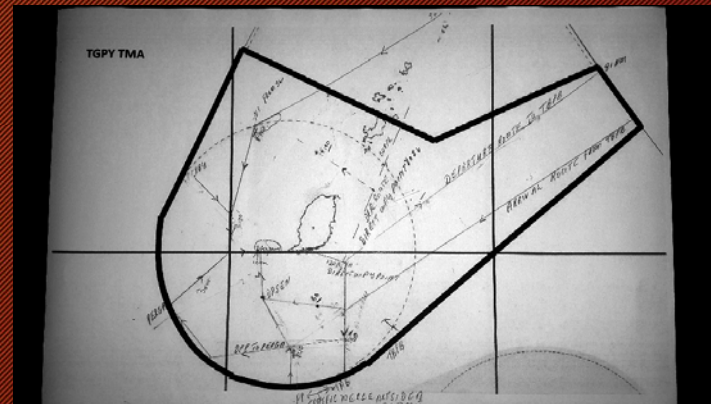
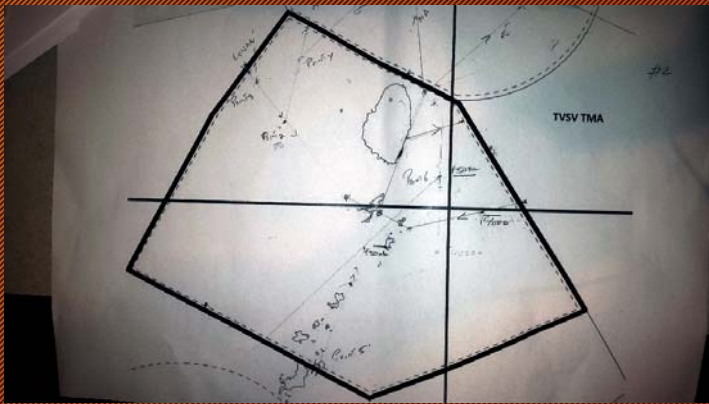
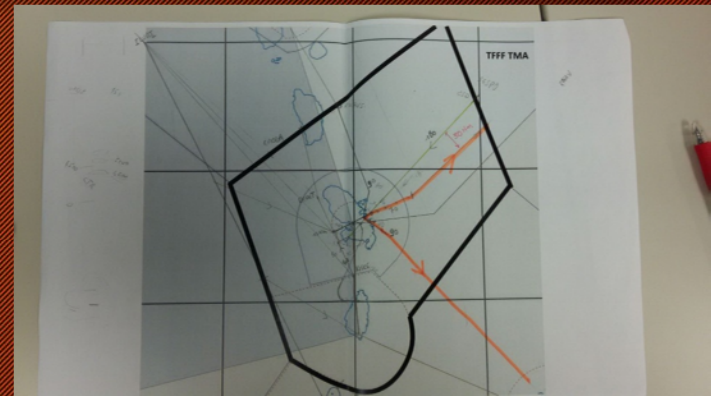
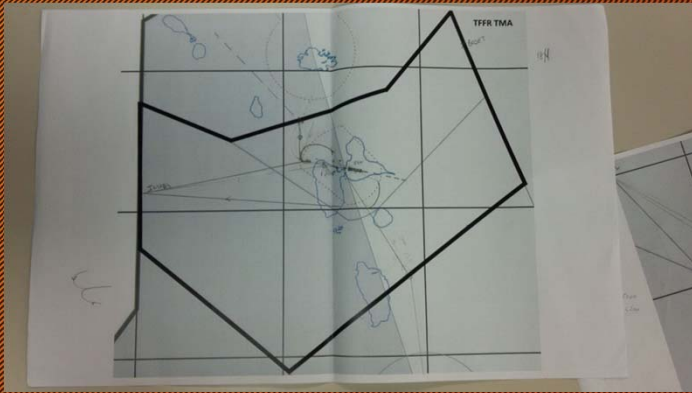


# Practical nature of workshops





# Conceptual drawings created during PBN Workshop





# Collaboration on upper airspace North - South route design through E/CAR

- Trinidad and Tobago has held several TELCONs with United States, (Miami FIR, San Juan FIR, New York FIR); Guyana, Suriname, Brazil, CANSO, IATA and ICAO
- Trinidad and Tobago provided the group with an analysis of the North - South traffic through the upper airspace of the Piarco FIR
- United States has proposed a new PBN route through the E/CAR and Trinidad and Tobago has provided input. It is currently being reviewed by Suriname and Brazil
- Other parties within the group are currently working on their own analysis
- Trinidad and Tobago is coordinating with adjacent FIRs to accept the IATA proposal of forty (40) Nautical Miles (NM) longitudinal separation (utilizing GNSS) crossing their common boundaries



# Recommendations

- Where required, States/Territories make official request for ICAO's assistance in communicating, with their decision makers, the importance of PBN implementation and its financial/human resource requirements
- The E/CAR TMA Airspace Concept Design should be developed as a project, requires a lead and access to necessary human/financial resources
- Decision makers should take into consideration and allocate to their budgetary planning the requirement for the members of the Airspace Concept Design Subgroup to meet at least once every quarter
- E/CAR States/Territories should send their preliminary working/draft airspace concept plans to the ATM Committee Rapporteur by 20 January 2016, in order for it to be considered by Trinidad and Tobago during the Airspace Design meeting scheduled for late January 2016



# Recommendations

- States/Territories should ensure that PBN implementation is conducted in a manner that leads to improvements in safety and efficiency. The appropriate safety and cost-benefit analysis (the use of performance metrics) should accompany any proposed implementation plans
- States/Territories should make every effort to attend the airspace design workshop being scheduled for the first quarter next year



# Thank You for your attention

## **TEAMWORK MAKES THE DREAM WORK**

---

Great TEAMWORK  
makes things happen  
more than anything else  
in organisations – more  
than skill, qualifications  
or money!

Whether it's your Family,  
Church, Ministry,  
Business, Personal life

