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Miami, United States, 22 to 24 October 2024

- Agenda Item 4: Update of the E/CAR/CATG Work Programme and Activities**
4.2 ICAO NACC current projects and initiatives supporting the E/CAR region in ANS matters

TRINIDAD AND TOBAGO UPDATE ON ATFM INITIATIVES

(Presented by Trinidad and Tobago)

EXECUTIVE SUMMARY	
This information paper provides an update on the ATFM related activities undertaken by Trinidad and Tobago within the Piarco FIR.	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Economic Development of Air Transport• Environmental Protection
<i>References:</i>	<ul style="list-style-type: none">• Eighth North American, Central American and Caribbean Working Group Meeting (NACC/WG/8) ICAO NACC Regional Office, Mexico City, Mexico, 29 August to 1 September 2023• CADENA Regional Implementation Group Monthly WebEx February 28, 2024

1. Introduction

1.1 This paper provides a summary of ATFM related activities conducted by Trinidad and Tobago.

2 Discussion

2.1 Trinidad and Tobago recognize the importance of Collaborative Decision Making (CDM) and the availability of accurate and dynamic information for ensuring the smooth and harmonized flow of air traffic through the region.

2.2 Trinidad and Tobago has invested in a system which is capable of supplying demand information as well as providing a CDM platform within the Piarco FIR. Additionally, ATFM procedures have been developed, documented and staff have been trained to implement various procedures based on events or contingencies.

2.3 Based on its location, the Piarco FIR is usually the first airspace affected by tropical cyclone activity originating in the Atlantic Ocean. Through the CANSO ATFM Data Exchange Network for the Americas (CADENA) platform, Trinidad and Tobago is able to provide information to the relevant stakeholders as any weather phenomena passes through the airspace; and assist with the coordination of flight paths that circumvent the storms trajectory.

2.4 During the first major hurricane of the 2024 season, Hurricane Beryl, information on alternate routes were relayed through the CADENA network which provided assistance to airlines to continue operations. Dispatchers were allowed to file waypoint to waypoint based on avoidance of the storm's path. This is an example of the interrelationship between the ATFM process and Airspace Management procedures. Additionally, information regarding the status of the various aerodromes within the Piarco FIR; along with the ATS capabilities of the islands of the associated TMAs were relayed via the Eastern Caribbean Contingency WhatsApp group chat.

2.5 Apart from managing traffic during weather phenomena, ATFM procedures are also required during special events. The International Cricket Council (ICC) Men's T20 Cricket World Cup (ICC/T20/CWC) was hosted by the United States of America (USA) and the West Indies during the period 1 June to 29 June 2024. Fifty-five (55) matches were played in total, with thirty-nine (39) of the games being held in the Eastern Caribbean and Guyana. Trinidad and Tobago therefore embarked on a plan towards the implementation of some degree of Air Traffic Flow Management (ATFM) to treat with the projected increase in traffic volume.

2.6 For the purpose of implementing ATFM measures during the ICC T20 Men's CWC 2024; in January 2024 (six months prior to the event), Trinidad and Tobago convened a specific multi-disciplinary T20 CWC ATFM Team (T20/CWC/ATFM/TEAM) from within the Trinidad and Tobago Civil Aviation Authority (TTCAA) Air Navigation Services Division (ANSD). The team was charged with the responsibility of developing an Action Plan to manage the expected increase in air traffic demand.

2.7 The Planning for this major event was accomplished in three (3) phases, which are described below:

2.7.1 **Strategic Phase**

2.7.1.1 This phase was initiated by the formation of the Trinidad and Tobago T20/CWC/ATFM/Team, in January 2024; and the development of an Action Plan by February 2024. This plan consisted of:

- a) The analysis of traffic demand and conduct of traffic forecast, based on historical traffic data,
- b) The development of specific ATFM procedures to manage demand-capacity imbalances,
- c) The development of Contingency Procedures (Surveillance and/or Communication outages checklist),
- d) The development of a process and schedule to disseminate the ATFM Daily Plan (ADP),

- e) The conduct of briefings, to the relevant Air Traffic Control personnel, on procedures mentioned in b, c and d, above
- f) The conduct of Stakeholder consultation meetings to advise on and receive feedback on procedures, and
- g) The promulgation of an Aeronautical Information Circular (AIC), on 9 May 2024, to advise of the Piarco Air traffic Services' intention to implement basic ATFM Procedures during the period of the ICC Men's T20 CWC 2024. The AIC also requested that operators provide schedules, or advance notification of intended flight movements in the case of general aviation.

2.7.2 Pre-tactical Phase

2.7.2.1 Analysis of traffic demand and airspace outlook were carried out both at the beginning of every week, and one day before operations. Airspace outlook included items such as, meteorological data, airspace constraints, equipment outages and staffing issues.

2.7.2.2 Pertinent information was shared with the ATM community daily via the CADENA Operational Information System (OIS), and twice weekly on the CADENA Operations Planning Web conferences.

2.7.2.3 Where required, information was also shared via the promulgation of NOTAMs.

2.7.3 Tactical Phase

2.7.3.1 This phase consisted of planning procedures on the day of operations. During the tactical phase, ATFM measures, determined from the previous pre-tactical phase, were adjusted in accordance with real-time data.

2.7.3.2 Real-time ATFM information was shared via:

- a) NOTAM, (as required)
- b) Urgent Advisories on the CADENA OIS,
- c) Edits to the TTCAA ADP of the CADENA OIS, and
- d) CADENA WhatsApp chat

2.8 Stakeholder Consultation Meetings

2.8.1 In order share, harmonise and agree on its ATFM Action Plan with the relevant stakeholders, Trinidad and Tobago conducted several Regional and National stakeholder consultation meetings.

2.8.2 At the CADENA Regional Implementation Group (RIG) and Collaborative Decision Making (CDM) Meeting, held in Cancun, Mexico, 14 – 17 May 2024, the CADENA Management team offered support to Trinidad and Tobago by offering to facilitate any ad-hoc web conferences that may become necessary during the event.

2.8.3 CADENA also advised that they would offer assistance to forward to the Federal Aviation Administration (FAA) Air Traffic Control System Command Centre (ATCSCC), any Off-load Routes that Piarco may want to use during the ICC T20 CWC, so that they may be published as advisories on the ATCSCC's OIS.

2.8.4 Trinidad and Tobago also convened Strategic Planning Meetings amongst its National Stakeholders. The following items were discussed at these meetings:

- a) General Security concerns,
- b) State contingency plans, and
- c) VIP ingress into the country via the Internal Airports

3. Conclusion

3.1 Although Trinidad and Tobago had anticipated and planned for a significant increase in air traffic demand, a post operational analysis revealed that air traffic demand was only 3.75% more than the normal (without any special event) traffic figure expected for the month of June.

3.2 Despite a lower traffic increase than originally projected, Trinidad and Tobago ensured that an Action Plan was in place and that its Air Navigation Services were fully prepared to safely and effectively manage any spikes in demand and/or contingency situations.

3.3 ATFM procedures and Airspace Optimization initiatives work hand in hand to ensure a smooth flow of traffic during normal periods and also provide a mechanism for continued operations during abnormal situations.

3.4 The CADENA platform provides an excellent opportunity for CDM and is beneficial to both ANSPs and airline operators.

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