International Civil Aviation Organization North American, Central American and Caribbean Office

INFORMATION PAPER

ANI/WG/2 — IP/20 27/05/15

Second NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/2)
Puntarenas, Costa Rica, 1 to 4 June 2015

Agenda Item 4:

Follow-up on the NAM/CAR Regional Performance Based Air Navigation Implementation Plan (NAM/CAR RPBANIP)

4.1 Progress reports of the Task Forces and the ANI/WG

UNITED STATES OFFSHORE CARIBBEAN AIRSPACE OPERATIONS IMPROVEMENT

(Presented by Federal Aviation Administration)

EXECUTIVE SUMMARY

In late 2014, discussions between the Federal Aviation Administration (FAA) headquarters, airspace users, and FAA facilities that manage the offshore airspace in the Caribbean, identified the need for a comprehensive approach to improve operational performance in the region. The FAA requested the Eastern Regional Task Group (ERTG), a working group of the Tactical Operations Committee (TOC), to provide recommendations on the highest priority infrastructure upgrades and airspace modifications to improve operations in the Caribbean. These recommendations are due to FAA headquarters in July 2015 and will be evaluated carefully in an effort to develop a broad-reaching strategy and funding plan that addresses the identified improvements in the region.

| Strategic Objectives: | • | Safety Air Navigation Capacity and Efficiency |
|--------------------------|---|---|
| | • | Environmental Protection |
| References: | • | ERTG Draft Conclusions Report |

1. Introduction

The FAA is committed to collaboratively identifying and addressing efficiency impacts to the National Airspace System (NAS). Ongoing projects currently accomplish this with focus on the airspace and PBN procedures around the Core 30 airports in the continental United States (CONUS) using a well-defined process to address issues and make improvements accordingly. Other geographic areas are also in need to enhance the airspace and improve operations but are limited by national program priorities, infrastructure development in non-U.S. territories, and available funding. One of these areas of focus is in the Caribbean mostly comprised of the offshore airspace managed by Miami Air Route Traffic Control Center (ARTCC) and San Juan Combined/Center Radar Approach Control (CERAP). Traffic in both of these facilities has increased steadily in recent years while the airspace capacity remains largely unchanged. Select infrastructure and procedural enhancements combined with traffic management tools, such as Miles in Trail (MIT) spacing and Airspace Flow Programs (AFPs), have squeezed as much capacity out of the existing airspace but a demand/capacity imbalance persists. Both industry and service providers at the facility level believe that further improvements in efficiency are not possible without some level of airspace and infrastructure improvements.

2. Discussion

- Since January 2105, the Eastern Regional Task Group (ERTG) of the Tactical Operations Committee (TOC) has engaged airspace users and operational personnel from Miami ARTCC and San Juan CERAP in robust discussions in an effort to brainstorm potential mitigations for the challenges and shortfalls of the Caribbean airspace. Some infrastructure improvements, such as a new radio installation co-located at the Providenciales airport in the Turks and Caicos Islands, are already being implemented. These radios will improve pilot/controller communication for Miami Center for the Turks and Caicos Islands sector, and will also provide redundancy to neighboring sectors.
- Another such improvement is the Central/South Florida Metroplex project that entails the restructuring and streamlining of arrival and departure procedures utilizing PBN enroute airways that tie into terminal airways or instrument procedures. This project will also include the implementation of Optimized Profile Descent (OPD) procedures that will allow aircraft to operate in optimum descent rates resulting in fewer emissions and fuel savings.
- 2.3 In addition, the FAA is supporting other activities in the Caribbean such as the NACC PBN implementation project, which will enhance the operation in the region by streamlining and harmonizing enroute and terminal routes that will optimize operations as aircraft transition Flight Information Regions (FIR).
- 2.4 The ERTG Report will be submitted to FAA headquarters in the July 2015 timeframe for evaluation and approval.

3. Conclusion

- 3.1 The FAA is taking a proactive approach in improving efficiencies in the Caribbean airspace that it has purview over. The agency is engaging experts in the field facilities, operators that use the Caribbean airspace, headquarter subject matter experts in automation, operational data sharing, ADS-B implementation, communications, oceanic and offshore procedures, and air traffic flow management. In addition, the FAA is ensuring that their efforts will harmonize with the initiatives that are currently being pursued in the NACC region. The ICAO NACC office will receive formal notification from the FAA of the intended actions to improve operational efficiencies resulting from the report.
- 3.2 The subsequent mitigation strategies will result from the July 2015 report to FAA headquarters.