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**Fourteenth Meeting of the North American, Central American and Caribbean  
Directors of Civil Aviation (NACC/DCA/14)  
St. George's, Antigua and Barbuda, 1 to 5 June 2026**

**Agenda Item 6: Seamless and Interoperable Air Navigation Services (ANS) that are Fit for the Future**

**PENDING IMPROVEMENTS TO FAA MANAGED CARIBBEAN AIRSPACE**

(Presented by United States)

<b>EXECUTIVE SUMMARY</b>	
<p>This paper presents a comprehensive overview of the FAA's planned enhancements to the FAA's communication, surveillance and power systems that support the FAA's management of airspace in the Caribbean region. The collective goal of these projects is to mitigate reoccurring CNS system outages that have been a hinderance to the region.</p>	
<b>Action:</b>	<p>a) Take note of the information provided in this paper and consider what potential airspace efficiency and capacity enhancements the region may be able to implement as a result of these enhancements</p> <p>b) Encourage all regional ANSPs to share their own airspace and air traffic service communications, navigation and surveillance system modernization plans with the region so we can proactively mitigate any potential problems, reduce any unnecessary redundant efforts and plan for future airspace efficiency and capacity improvements accordingly</p> <p>c) Suggest any other actions deemed appropriate</p>
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• RTCA Recommendations to Improve Operations in the Caribbean: A Report of the Tactical Committee in Response to Tasking from The Federal Aviation Administration, July 2015</li><li>• GREPECAS/23 – WP 8.18</li></ul>

**1. Introduction**

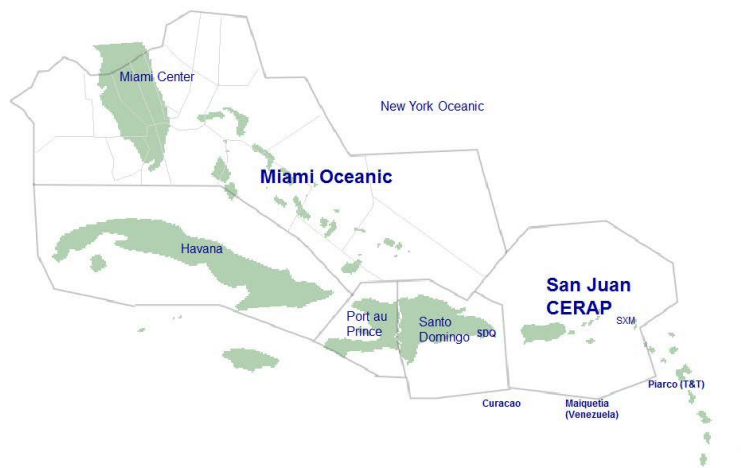
1.1 For many years now, stakeholders involved with managing and operating air traffic between the United States and the Caribbean have identified a need to address airspace capacity, operational performance and safety in the region. After years of trying to secure the funding and human resources

needed to adequately address those legitimate stakeholder concerns, the FAA has finally succeeded and as a result, launched its Caribbean Call To Action (CCTA) Project. This project is being undertaken with an ambitious timeline and in collaboration with our regional partners. The scope of the CCTA is the subject of this paper.

## 2. Background

2.1 Within the National Airspace System (NAS), the Federal Aviation Administration (FAA) Caribbean region is defined as the combination of Miami Air Route Traffic Control Center (ARTCC) airspace over water (known as ZMA Oceanic) and the San Juan Combined Control Facility (known as ZSU). The diagram below highlights ZMA Oceanic and ZSU airspace:

*Figure 1: The FAA's Caribbean Airspace:*



2.2 In November 2014, the FAA tasked the Radio Technical Commission for Aeronautics (RTCA) with identifying infrastructure and airspace issues that need to be addressed to improve the safety, capacity and efficiency of operations in the Caribbean. The FAA acknowledged in its tasking letter that airspace in the region has remained largely unchanged for many years despite the growth of air traffic in the region. Though small improvements have been made to existing infrastructure and procedures, a demand-capacity imbalance continues to exist, particularly during peak seasonal periods. Demand in the region is expected to continue growing and absent significant improvements to infrastructure and airspace, delays are expected to escalate, adversely impacting the traveling public and operators in the region.

2.3 In direct response to the FAA tasking, RTCA developed a comprehensive set of infrastructure and airspace priorities that would improve the safety, capacity and efficiency of the Caribbean airspace. Since 2014, many of the recommendations stemming from the RTCA recommendations have already been implemented (e.g., installation of dedicated shout lines between certain adjacent international facilities, implementation of ADE with Santo Domingo, improved access to Cuban airspace in Girron Corridor, etc.). Many of the remaining recommended improvements are now being addressed through targeted projects.

### **3. The Caribbean Call To Action (CCTA) Project**

3.1 The Caribbean Call-To-Action is an FAA initiative focused on strengthening critical infrastructure across the Caribbean region. It encompasses nine targeted recommendations/priorities aimed at:

- Enhancing infrastructure resilience
- Improving power systems reliability
- Increasing telecommunications reliability
- Expanding frequency and radar coverage

3.2 Once implemented, these efforts are designed to address airspace and infrastructure challenges in the Caribbean, in support of Air Traffic Services at Miami Center (ZMA ARTCC).

3.3 The current list of projects that make-up the CCTA are estimated to be completed by the end of Fiscal Year (FY) 2028. However, this timeline is an estimate and contingent on both funding and resource availability.

3.4 The nine targeted priorities are:

1. Mobile Alternative Power Solutions
2. ADS-B Towers in the Caribbean
3. Hurricane Resiliency for infrastructure at Grand Turk (GDT)
4. Harden Back-up Power
5. Permanent Alternative Energy
6. Telecommunication Diversity Improvements
7. Frequency Resiliency at GDT
8. Frequency Resiliency at Providenciales (PLS)
9. Improved Remote Monitoring

### **4. Early Accomplishments**

4.1 Surveillance Enhancements - In 2025, with the help of the Turks and Caicos Islands Airport Authority, (TCIAA) the FAA installed a terrestrial ADS-B antenna at its leased site in Providenciales. The site became operational (under conditional approval) in October 2025, and it is already being used by Miami ARTCC to support operations. Thus far, all reports have yielded positive results.

4.2 The FAA has also completed a site survey and is estimated to complete the design phase for an additional terrestrial ADS-B antenna, in early 2026. It will be installed near the FAA-owned Air Traffic Control Beacon Interrogator (ATCBI) on Grand Turk. The goal is to have that site operational in the fourth quarter of 2026.

4.3 Communication Enhancements - Three communications Remote Maintenance Monitoring (cRMM) systems have been installed; (1) FAA equipment at the FAA's leased site in Providenciales, (2) the site in Grand Turk (GDT) and (3) the site at Great Inagua (ZIN). All three cRMM's connected to the Systems Operations Command (SOC) station at the Miami Air Route Traffic Control Center (ARTCC) where they will provide instantaneous notification of problems with those respective sites and allow for remote reset of the systems. These will greatly reduce the number of required restoral trips out to the islands for simple manual resets. They will also offer insight into the health of our telecommunication transmitter and receiver systems.

4.31 In an effort to improve telecommunication diversity and mitigate reliability problems, the FAA has also deployed quick-install Very Small Aperture Terminals (similar to direct TV) to provide satellite transport from Providenciales, Turks and Caicos and Great Inagua, The Bahamas to the Miami ARTCC.

4.4 Power Enhancements - Four miniature uninterruptible power supply (MUPS) units were installed to support all terrestrial and satellite telecommunication infrastructure at FAA sites in George Towne and Bimini in the Bahamas and at Grand Turk, and Providenciales in Turks and Caicos Islands. A mobile engine generator (EG) has also been installed in George Towne. These temporary solutions will remain until the FAA can move all telecommunication infrastructure to the FAA's critical power supply system.

## **5. Future Enhancements**

5.1 A third terrestrial ADS-B antenna is being planned for installation on FAA-owned equipment in George Towne, The Bahamas. The target implementation date for that site is sometime between October 2026 and September 2027.

5.2 Critical power on Caribbean islands is often intermittent and unstable resulting in frequent intermittent bumps or drops in power. The FAA has therefore purchased two mobile photovoltaic systems to temporarily deploy to problematic sites like Grand Turk (GDT) and George Towne (FK7). These contracts are expected to be awarded in December 2025 and sent to Oklahoma City for testing and an engineering assessment. Once deployed, these will be temporary installations while the FAA pursues permanent alternative energy installations for the same sites. This will reduce our reliance on unreliable commercial power, increase equipment reliability, and reduce delay-inducing outages.

5.3 A permanent power solution to support FAA-owned equipment at George Towne, The Bahamas and Grand Turk, Turks and Caicos Islands is also being planned. The target installation date for the permanent power solution at those sites is September 2026 into 2027 for the initial set of sites identified.

5.4 In a separate but equally important project, the FAA has been working with representatives from Princess Juliana International Airport in Sint Maarten to establish an FAA-owned and maintained Remote Air-to-Ground (RCAG) communications facility near that airport. Once completed (targeted for completion in 2026), the site will significantly reduce the VHF/UHF communication gaps that currently exist in the eastern portion of the airspace managed by the San Juan Combined Control Facility.

## **6. Conclusion**

6.1 As you can see from the aforementioned information, the FAA is on-track to make significant improvements to the reliability of air traffic services by the end of 2026 and in reality, has already significantly improved the reliability of services in the Caribbean over the past six months.

**7. Suggested Actions**

7.1 The meeting is invited to:

- a) Take note of the information provided in this paper and consider what potential airspace efficiency and capacity enhancements the region may be able to implement as a result of these enhancements
- b) Encourage all regional ANSPs to share their own airspace and air traffic service communications, navigation and surveillance system modernization plans with the region so we can proactively mitigate any potential problems, reduce any unnecessary redundant efforts and plan for future airspace efficiency and capacity improvements accordingly
- c) Suggest any other actions deemed appropriate

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