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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

**STATUS OF IMPLEMENTATION OF REGIONAL AIR NAVIGATION MODERNIZATION INITIATIVES,
NACC/WG ACTIVITIES AND FOLLOW-UP TO NACC/WG/10 OUTCOMES**

(Presented by the NACC/WG)

EXECUTIVE SUMMARY

This Information Paper presents the progress achieved by the North American, Central American and Caribbean Working Group (NACC/WG) following its Tenth Meeting (NACC/WG/10) and the Fourth Meeting of Rapporteurs (NACC/WG/RAP/04). The paper summarizes the main regional air navigation modernization initiatives, implementation challenges, governance improvements, and collaborative activities being coordinated through the NACC/WG framework. It highlights the importance of strengthening support to the NACC/WG, its Rapporteurs and Task Forces, as the sole regional implementation mechanism for air navigation modernization in the NAM/CAR Regions. The paper also presents the status of implementation of several regional initiatives related to Automatic dependent surveillance – broadcast (ADS-B), controller-pilot data link communication (CPDLC), Automatic dependent surveillance – contract (ADS-C), Air Traffic Services Inter-facility Data Communication (AIDC), ICAO Weather Information Exchange Model (IWXXM), Global navigation satellite system (GNSS) resilience, Minimum operational network (MON), Satellite-based augmentation system (SBAS), cybersecurity, spectrum protection, contingency planning, operational resilience, and National Air Navigation Planning aligned with the ICAO Global Air Navigation Plan (GANP) and ICAO Strategic Plan 2026–2050.

Strategic Objectives:

- Every Flight is Safe and Secure
- Aviation is Environmentally Sustainable
- Aviation Delivers Seamless, Accessible, and Reliable Mobility for All
- No Country Left Behind
- The Economic Development of Air Transport Assures the Delivery of Economic Prosperity and Societal Well-Being for All

References:

- Tenth Meeting of the North American, Central American and Caribbean Working Group (NACC/WG/10), Tulum, Mexico, 8 to 12 September 2025

	<ul style="list-style-type: none"> • Fourth Meeting of Rapporteurs of the North American, Central American and Caribbean Working Group (NACC/WG/RAP/04), Online, 6–7 May 2026
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1. Introduction

1.1 The NAM/CAR Regions continue experiencing growth in air traffic operations, increasing the need for modernization, operational resilience, interoperability, and harmonized implementation of air navigation systems.

1.2 The NACC/WG remains the sole regional implementation mechanism supporting the coordinated implementation of ICAO Standards and Recommended Practices (SARPs), the Global Air Navigation Plan (GANP), the Aviation System Block Upgrades (ASBU), the Basic Building Blocks (BBB), and CAR/SAM Planning and Implementation Regional Group (GREPECAS) regional priorities.

1.3 During NACC/WG/10 and NACC/WG/RAP/04, the Meetings reviewed regional modernization priorities, governance improvements, implementation challenges, and operational coordination activities required to support safe, resilient, and sustainable air navigation systems.

2. Discussion

2.1 Regional Air Navigation Modernization Initiatives

2.1.1 The NACC/WG continues coordinating implementation activities related to several Air navigation modernization initiatives:

- ADS-B surveillance
- ADS-C/CPDLC implementation
- AIDC
- Airport operations and planning (AOP)
- Basic Building Blocks (BBB) in all air navigation areas
- ICAO Meteorological Information Exchange Model (IWXXM)
- Aircraft based weather observations (ABO)
- Aeronautical Information Management/System wide information management (AIM/SWIM) modernization
- Free Route Airspace (FRA)
- Air Traffic Flow Management (ATFM)
- Airspace Management and Capacity Balancing (AMCB) collaborative implementation activities
- GNSS resilience and MON
- cybersecurity over Air Navigation Services (ANS)
- SBAS strategic planning
- contingency planning, and
- spectrum protection activities including Meteorological (MET) services.

2.1.2 The Meetings emphasized that modernization activities must align with:

- ICAO Strategic Plan 2026–2050;
- GANP Version 8;
- GREPECAS priorities;
- operational resilience objectives; and
- performance-based implementation methodologies.

2.1.3 The Meetings also recognized the importance of collaborative airspace management and capacity balancing initiatives to improve operational efficiency, optimize airspace utilization, to support environmental sustainability objectives, including the ICAO Long-Term Global Aspirational Goal (LTAG) of net-zero carbon emissions by 2050, and enhance regional operational resilience.

2.1.4 The Meetings also emphasized the importance of interregional coordination between the NAM/CAR and SAM Regions to support harmonized implementation of Free Route Airspace, ATFM, and collaborative operational initiatives.

2.1.5 The Meetings also recognized the increasing importance of regional coordination mechanisms to support large-scale operational events, projected traffic growth, operational resilience, and emerging air navigation challenges across the NAM/CAR Regions.

2.2 **Operational Resilience and Meteorological Integration**

2.2.1 NACC/WG/10 highlighted the critical need to strengthen regional operational resilience to extreme meteorological phenomena affecting the CAR Region, particularly tropical cyclones and climate-related disruptions impacting the continuity and efficiency of aviation operations.

2.2.2 The MET/TF continues supporting the following priority areas:

- Implementation of the ICAO Meteorological Information Exchange Model (IWXXM)
- Strengthening of MET Quality Management Systems (QMS) and safety oversight
- integration of meteorological and climatological data into operational planning and decision-making processes
- Promoting Aircraft-Based Observations (ABO) and
- regional cooperation initiatives in support of aeronautical meteorology
- AIM/MET/SWIM integration activities.

2.2.3 Decision NACC/WG/10/06 encouraged the systematic integration of meteorological and climatological data into hazard identification and contingency planning processes to improve regional operational resilience including Air Navigation Service Providers (ANSPs) and aerodromes.

2.3 **Aeronautical Information Management (AIM) Modernization and System wide information management (SWIM)**

2.3.1 The Aeronautical Information Management Task Force (AIM/TF) continues advancing the transition from Aeronautical Information Service (AIS) to AIM through:

- digital AIM implementation;
- AIM regional monitoring tools;
- SWIM readiness activities;
- Competency-based training and assessments (CBTA) implementation for AIM personnel; and
- AIM/MET/SWIM integration activities.
- Flight and Flow Information for a Collaborative Environment (FF-ICE)

2.3.2 The Meetings highlighted the importance of regional dashboards, KPI monitoring tools, and harmonized implementation frameworks to improve implementation monitoring and reduce fragmentation of regional efforts.

2.4 **Common Regional Challenges**

2.4.1 The Meetings identified several recurring regional challenges:

- uneven implementation levels among States
- limited technical participation and expertise
- insufficient funding and resources
- weak integration among Task Forces
- limited KPI monitoring capabilities
- lack of updated National Air Navigation Plans (NANPs)
- increasing cybersecurity risks
- GNSS jamming and spoofing
- surveillance coverage gaps, and
- spectrum protection risks.

2.4.2 The Meetings also emphasized the importance of strengthening coordination among Civil Aviation Authorities (AAC), ANSPs, telecommunications regulators, and spectrum management entities to support the World Radiocommunications Conference (WRC-27) activities and protect aeronautical frequency spectrum.

3. **Conclusions**

3.1 The NACC/WG continues serving as the primary regional implementation mechanism supporting modernization, harmonization, and operational coordination of air navigation systems in the NAM/CAR Regions.

3.2 Significant progress continues in regional initiatives related to:

- surveillance modernization;
- digital communications;
- AIM modernization;
- Aerodrome certification and planning;
- operational resilience;
- GNSS resilience;
- MON development;
- cybersecurity;
- integration of meteorological and climatological information into operational planning and decision-making; and
- National Air Navigation Planning aligned with GANP Version 8.

3.3 The (NACC/WG has demonstrated significant progress in the implementation and coordination of regional air navigation initiatives aligned with the ICAO Global Air Navigation Plan (GANP), GREPECAS objectives, and performance-based implementation methodologies.

3.4 Through the active participation of more than 20 States and Territories, the NACC/WG has strengthened regional collaboration in the areas of Communications, Navigation and Surveillance (CNS), Air Traffic Management (ATM), AIM, MET, frequency management, cybersecurity, and contingency planning. Important achievements include the implementation and expansion of ADS-B surveillance infrastructure, modernization of Aeronautical message handling system (AMHS) and AIDC coordination capabilities, advancement of ATFM and contingency mechanisms, and the transition toward resilient IP/MPLS regional communication networks such as the Caribbean Air Navigation Services Network (CANSNET).

3.5 The Group has also expanded regional coordination activities related to cybersecurity over ANS, GNSS interference mitigation, SWIM readiness, and future FF-ICE/B2B operational environments. Operational and environmental benefits already demonstrated in the Region include improved surveillance coverage, enhanced interoperability, increased operational efficiency, and fuel and emissions reductions associated with modern CNS/ATM technologies. The NACC/WG continues to consolidate itself as the primary regional implementation mechanism supporting harmonized air navigation modernization and regional integration across the NAM/CAR Regions.

3.6 The Meetings highlighted the importance of:

- strengthening support to Rapporteurs and Task Forces and its active participation as part of the GREPECAS;
- improving regional coordination mechanisms;
- enhancing Key Performance Indicators (KPI) monitoring and dashboards;
- strengthening spectrum protection activities;
- improving resilience planning; and
- supporting Caribbean (CAR) States and Small Islands Development States (SIDS) modernization efforts.

3.7 Strong State participation, regional cooperation, harmonized implementation planning, and institutional support remain essential to achieve safe, resilient, interoperable, and sustainable air navigation systems in the NAM/CAR Regions.

3.8 The Meetings highlighted the importance of strengthening support to Rapporteurs and Task Forces, improving regional coordination, enhancing KPI monitoring, strengthening spectrum protection, improving resilience planning, and supporting modernization efforts for Caribbean (CAR) States and SIDS. While important progress has been achieved through regional implementation activities and coordination mechanisms, additional State participation, institutional support, technical resources, and harmonized planning remain necessary to ensure safe, resilient, interoperable, and sustainable air navigation systems in the NAM/CAR Regions.