



ICAO

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

NACC/WG/10 — IP/03
27/08/25

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

Agenda Item 5: NACC/WG Collaborative Task Forces Working Session

ADS-B IMPLEMENTATION IN CUBA

(Presented by Cuba)

EXECUTIVE SUMMARY	
This document presents a summary of the activities developed by Cuba for the implementation of ADS-B and its integration into the development of national and regional operational objectives.	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency
<i>References:</i>	<ul style="list-style-type: none">• Annex 10, ICAO Aeronautical Telecommunications Volume IV Surveillance and Collision Avoidance Systems;• Twenty-second Meeting of the Regional Planning and Implementation Group for the Caribbean and South America (GREPECAS/22).

1. Introduction

1.1 Following up on what was agreed at the GREPECAS/22 meeting, where States and Organizations were asked to develop an action plan for the implementation of ADS-B.

1.2 Cuba has been working on the national implementation of ADS-B, to benefit the CTA's situational awareness in the face of a future increase in traffic, to obtain surveillance data where current surveillance systems do not provide such data, to support the implementation of automated protocols, and to benefit the region with agreements to share surveillance data between States

1.3 ADS-B is element 1 of block 0 of the ASUR module of the global air navigation plan and an important element of the GANP technological thread. The benefit of the element with its implementation alone is to favor operational safety through the improvement of situational awareness. The ADS-B requires putting into operation a series of enablers prior to its commissioning, these enablers are:

1. Onshore infrastructure
2. Capability in aircraft avionics
3. Staff training
4. National regulation/legislation on the use of ADS-B

1. Analysis

2. The surveillance system implemented in the region of the national territory currently has 6 secondary radars, which cover more than 2000 feet throughout the FIR, it also has two ADSB stations, as autonomous surveillance sources, integrated into the MLAT systems of the west of the country.

2.2 Cuba has available onshore ADS-B infrastructure and is in the process of implementing the other enablers.

2.3 In this regard, the "SURVEILLANCE STRATEGY FOR AIR NAVIGATION SYSTEMS IN THE REPUBLIC OF CUBA" is proposed, which recommends:

2.3.1. Ensure that airspace surveillance services are improved and increased, taking into account the following:

- Coverage
- Update rate
- Precision and accuracy
- Level of information available
- A/C/S/ADSB DO260B mode surveillance

2.3.2. Establish that the ADS-B system will be integrated into the current surveillance systems of the Air Traffic Control of the FIR Habana, for which there will be a comprehensive deployment plan of sensors, which guarantee that from 2027 we will have an operational network with the DO-260B version or higher and with operational coverage throughout the FIR.

2.3.3. Maintain an Optimal Independent Surveillance System Network in order to provide the surveillance service to aircraft that do not yet have ADS-B capabilities, without affecting operational coverage in the FIR.

2.3.4. All surveillance sources that are part of the surveillance system for Air Traffic Control of the Havana FIR must be processed by the automated system of the National Air Traffic Control RADCONM.

2.3.5. Establish the monitoring of the performance of the ADS-B signals of the aircraft flying in the airspace of the Havana FIR and that this monitoring includes the analysis of the quality of the signals of the surveillance sensors of the national territory.

2.3.6. Increase the possibilities of sharing surveillance data with adjacent FIRs by transmitting SSR and ADSB DO-260B information through the new CANSNET network to be implemented in 2026.

2.3.7. ADS-B shall be used to provide the air traffic control service when the quality of the information contained in the ADS-B message exceeds the values specified by the competent authority, through the certification of the respective sensors.

2.3.8. From 1 January 2027, and unless otherwise authorized by the aeronautical authority, an aircraft may not be operated if it does not have equipment installed that meets the performance requirements and test procedures of RTCA DO-260B or higher, "Minimum Operating Performance Standards for Automatic Surveillance-Broadcast Dependent Transmission (ADS-B) of 1090 MHz Extended Spontaneous Signals and Transmission of Information Services of traffic (TIS-B)".

2.3.9. Use the ADSB information provided by the installed MLAT stations to be integrated into the air traffic control system.

2.3.10. The current Independent Surveillance Systems in operation, considering their built-in ADS-B systems, will be maintained only as initial support for the national ADS-B network, as they do not have the capacity to receive responses in DO-260B or higher.

2.3.11. Independent Surveillance Systems will continue to be an alternative means of aeronautical surveillance, providing their respective services both in the transition phase to ADS-B and for the control of aircraft not equipped with suitable transponders.