



ICAO

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

WORKING PAPER

E/CAR/NTG/12 & E/CAR/RD/10 — WP/06  
24/07/23

**Twelfth Eastern Caribbean Network Technical Group (E/CAR/NTG/12) and Tenth Eastern Caribbean Radar Data Sharing Ad hoc Group (E/CAR/RD/10) Meetings**  
Miami, United States, 24-25 July 2023

**Agenda Item 4: Surveillance Sharing Activities**  
**4.1 Surveillance/Automatic Dependent Surveillance – Broadcast (ADS B)/Multilateration (MLAT) Developments/Updates)**

**DEVELOPMENTS IN THE AREAS OF AUTOMATIC DEPENDENT SURVEILLANCE – BROADCAST (ADS-B)/MULTILATERATION (MLAT) IN THE PIARCO FIR**

(Presented by Trinidad and Tobago)

**EXECUTIVE SUMMARY**

This working paper presents information on developments in the areas of Automatic Dependent Surveillance – Broadcast (ADS-B)/Multilateration (MLAT) in the Piarco FIR.

<b>Action:</b>	Suggested actions are presented in Section 3.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li><li>• Economic Development of Air Transport</li><li>• Environmental Protection</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• E/CAR/NTG/11 &amp; E/CAR/RD/9 Meetings</li></ul>

**1. Introduction**

1.1 Among the Block Upgrades, the Block 0 module “Initial Capability for Ground Surveillance” recommends States to implement ADS-B, which provides an economical alternative to acquire surveillance capabilities especially for areas where it is technically or commercially not feasible to install radars.

1.2 The Surveillance Concept for Piarco FIR includes the provision of ADS-B services to augment the existing SSR source of surveillance. The analysis of trial data showed that over eighty-five percent (85%) of aircraft transiting the Piarco continental airspace are equipped for ADS-B. The Piarco ACC shall be repository for all the ADS-B/WAM data processing where the data will be integrated into the Piarco ATM System and the Multi Radar Tracker (MRT). The combined data from all available surveillance sources will be available over the E/CAR AFS Network for distribution to the E/CAR States.

**2. Discussion**

2.1 In August 2018 the TTCAA engaged ICAO TCB for the ADS-B/WAM project for the procurement and implementation of ADS-B within the continental airspace and WAM in the South Sector of the Piarco FIR. After the open tendering process and evaluation, the successful vendor, meeting the technical requirements, was recommended by ICAO.

2.2 Due to the Covid-19 pandemic, the contract, although negotiated, was on hold. The project initially envisaged to be completed in 2019 in two (2) phases. It's now rescheduled to start in the last quarter of 2023 with the first phase, ADS-B/WAM System, being implemented in Trinidad, Tobago and Barbados with the installation, testing, validation, and integration. The second phase, ADS-B Sub System composed of two (2) ADS-B Ground Stations, should be completed by the second quarter of 2024 with the installation, testing, validation, and integration of the sites in Antigua & Barbuda and Saint Lucia. This schedule is tentative pending any unforeseen circumstances that may adversely affect shipment of equipment, travel and weather related matters.

**3. Suggested actions**

3.1 The Meeting is invited to:

- a) Take note of the information provided; and
- b) agree to any other actions as deemed appropriate.