ADS-B PLANNING INITIATIVE TRINIDAD AND TOBAGO

Trinidad and Tobago Civil Aviation Authority
TECHNICAL SPECIFICATIONS

• Operating Frequency 1090 MHz
• DATA format ASTERIX CAT21/CAT23/CAT22/CAT62
• RTCA DO-260A
• RTCA DO-260
• Capacity up to 600 targets
Introduction to ADS-B Technology

- ADS-B was included in the package of equipment of the ATM system
- ADS-B Receiver installed on the roof of Piarco Control Tower
- Display of ADS-B track available in CNS equipment room
- ADS system monitor available in CNS equipment room
Observed Range of ADS above FL290
SSR Coverage in TTZP FIR
ADS-B Coverage on the TTPP – TTCP Route

- Scheduled Airline on Domestic Route has 100% ADS-B
- Aircraft to/from TTCP are not under ADS-B coverage below F070
- Aircraft to/from TTPP under ADS-B coverage from the Runway
- Approximately 40 scheduled daily domestic movements
Range of ADS-B in NE Quadrant

ADS-B track 110 NM
Types of Track Symbols

- ADS composite track
- SSR track
- Flight Plan Track
ADS-B system monitoring display
Flight Data Collected

ADS-B data collected for flights within range of ADS-B (October 2013)

- Less than 60% of the random sample of aircraft were ADS-B equipped
- Over 40% of the sample did not file ADS-B equipment
- Data collected classified by Operator and type of aircraft
ADS-B options for Piarco

• Placement of antennae to give full coverage of the domestic airspace

• Assess the feasibility of using ADS-B to add redundancy to the continental SSR

• Using emerging technology
Estimated range with two additional antennae
Estimated range with two additional antennae
ADS-B challenges for Piarco

- Reliable SSR in the continental and domestic airspace
- Competing priorities for improving ATS in the Oceanic Airspace (CPDLC, ADS-C, PBN)
- Limited application of a single antenna
- Regional standardization of equipment
- Emerging ADS-B technology – Space Based ADS by 2018
Gracias por su Atencion