E/CAR/CATG/9 — WP/08 17/07/25

## Ninth Eastern Caribbean Civil Aviation Technical Group Meeting (E/CAR/CATG/9) Miami, United States, 28 to 31 July 2025

Agenda Item 4: Update of the E/CAR/CATG Work Programme and Activities
4.2 Status of ECAR Air navigation (ANS) Infrastructure

# ECAR-FAA AERONAUTICAL FIXED SERVICE NETWORK (AFS) CONNECTION UPGRADE / PERFORMANCE

(Presented by United States)

EXECUTIVE SUMMARY	
This Working Paper seeks to discuss efforts to streamline the Eastern Caribbean Aeronautical Fixed Service Network upgrade at FAA San Juan and improve trouble resolutions.	
Action:	Suggested actions are presented in Section 4.
Strategic Objectives:	Air Navigation Capacity and Efficiency
References:	Project to Upgrade the ECAR AFS Network

#### 1. Introduction

- 1.1 ECAR equipment at FAA San Juan (ZSU) routes voice communications to the FAA (New York [ZNY], ZSU, and Flight Services for 21<sup>st</sup> Century [FS21]) and Air Traffic Services Message Handling System [AMHS] services to Atlanta (ATL NEMC [Atlanta Network Enterprise Management Center]) for flight plan processing.
- 1.2 The upgrade initiative is in progress. It is required due to obsolete equipment (at ZSU) and telecom circuit improvements between the FAA and Trinidad and Tobago Civil Aviation Authority (TTCAA). ZSU is an important site for the ECAR upgrade project as it's the primary interface location between ECAR and the FAA (as depicted by the diagram below).
- 1.3 Efficient coordination between TTCAA/Telecommunications Services of Trinidad and Tobago (TSTT) and the FAA will help facilitate and streamline the installation and implementation of the upgrade.

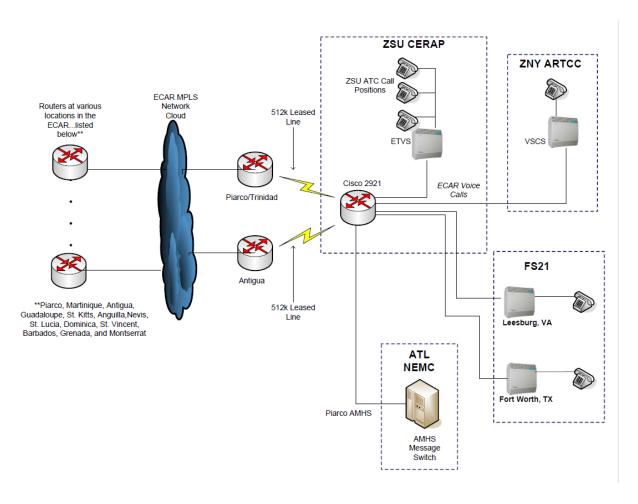
1.4 Although the current network has been reliable over the past year (July 2024 – June 2025), an upgrade of the network will extend its lifecycle with the additional goal of increasing its performance.

#### 2. Outage analysis of current network connections between ECAR and FAA

- 2.1 While the network is mostly stable, there is concern over lack of definitive resolutions for some network outages/service interruptions.
- 2.2 Noted outages:
  - 6/28/2024 Fiber cut in Pensacola, Florida that was repaired.
  - 7/26/2024 Fiber cut repaired.
  - <u>8/4/2024</u> Local Exchange Carrier (LEC) performed link certification to investigate errors on the link, no failures discovered.
  - <u>10/14/2024</u> Interexchange Carrier (IXC) circuit bounced (circuit equipment reset).
  - <u>11/13/2024</u> Cleared before isolation (no definitive fix action associated with service restoration).
  - 3/19/2025 Cleared before isolation.
  - 6/6/2025 Cleared before isolation.
- 2.3 Does TSTT/TTCAA receive sufficient notification of any type of outage?

#### 3. Network

- 3.1 Network links between FAA, San Juan, and ECAR (Piarco and Antigua) are 512K Due to the evolution of networks, upgrades to the speed of the network are planned.
- 3.2 Supports AMHS data to ATL (via San Juan) and voice services to ZSU, ZNY, and FS21.



## 4. Suggested actions

## 4.1 The Meeting is invited to:

- a) take note of the information presented in this Working Paper;
- b) provide feedback to support network upgrade initiatives and improved outage resolutions, and
- c) take any other action that the Meeting considers appropriate.