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WORKING PAPER

E/CAR/NTG/13 & E/CAR/RD/11 — WP/05
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Thirteenth Eastern Caribbean Network Technical Group (E/CAR/NTG/13) and Eleventh Eastern Caribbean Radar Data Sharing Ad hoc Group (E/CAR/RD/11) Meetings

Miami, United States, 21 October 2024

Agenda Item 3: Operation and Performance of the E/CAR Aeronautical Fixed Services (AFS) Network

3.1 Network Performances and General Aspects

General feedback of the French West Indies

(Presented by France)

EXECUTIVE SUMMARY	
This paper presents the situation in FWI and identifies possible improvement.	
Action:	Suggested actions are presented in Section 4.
<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">• Twelfth Eastern Caribbean Network Technical Group (E/CAR/NTG/12) and Tenth Eastern Caribbean Radar Data Sharing Ad hoc Group (E/CAR/RD/10) Miami, United States, 24-25 July 2023

1. Introduction

1.1 The E/CAR/AFS network is globally compliant with operational requirements.

1.2 Securing FWI E/CAR/AFS network connection is achieved through dual access: Guadeloupe (Antigua, Martinique) and Martinique (Trinidad & Tobago, Guadeloupe).

1.3 In addition of the ECAR network, a link between Martinique and Trinidad & Tobago supports radar data and 2 phone lines.

2. Status of the FWI Nodes

2.1 France appreciates the access to the E/CAR network by different kind of links: copper cable and optical fiber. They provided a better redundancy. This new architecture significantly reduces the loss of connections to the E/CAR network.

2.2 Guadeloupe and Martinique have two routers (one main, one spare) each fully equipped. Only the main is connected to the network and can be monitored by TSTT.

2.3 Since 2020, the periodic maintenance on the E/CAR router (check system and align configuration) is no longer carried out.

2.4 France Navigation Service appreciates the access to the E/CAR network. The E/CAR network work well in general in Martinique and Guadeloupe. However, we have suffered the following faults:

- Regularly, one or more of the 4 telephone lines on the ECAR router are unavailable. This requires a remote reset of this router. This operation is not instantaneous. The controllers are obliged to call their interlocutor several times to obtain the call.
- In Guadeloupe, the controller had some difficulties to pick up the call. The configuration of the ECAR router has been changed and the problem is solved. The backup router also needs to be reprogrammed.

3. Evolutions

3.1 France appreciates TTCAA's efforts to improve the ECAR network. We thank TTCAA for supporting the costs of this deployment. The equipment has been received in Martinique and Guadeloupe.

3.2 It is important to plan this operation to anticipate the needs:

- technical: location (in place of old equipment or in another bay), energy requirement.
- Safety: define the operational impacts during the change
- Organization: each site has its workload and must be able to follow this change.
Martinique engineers will not be available in 2024. Migration will be possible from 2025

4. Suggested actions

4.1 Meeting is invited to:

- a) restart the periodic maintenance on site of the ECAR equipment;
- b) improve router reset processing time to solve trouble line faster;
- c) deploy on the backup router the solution correcting the telephony problem in Guadeloupe;
- d) communicate to the states the planning and technical constraints of the network upgrade;
- e) take advantage of the implementation of the new ECAR architecture to establish an LOA between the different States; and
- f) set up performance indicators for AMHS and telephony services. For example, in 2022, the network performance indicator indicated an availability rate of 99.93% in Guadeloupe. But during this same year, this site suffered more than a month of AMHS outage. The network performance indicator is important but it must be accompanied by indicators showing the status of the transmitted data.