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

WORKING PAPER

Fifth Eastern Caribbean Network Technical Group (E/CAR/NTG/5) and Third Eastern Caribbean Radar Data Sharing Ad-hoc Group (E/CAR/RD/3) Meetings
Guadeloupe, France, 22 to 24 October 2014

Agenda Item 2:   **E/CAR AFS Network**
       2.1   Network performance analysis and general aspects

MPLS NETWORK PERFORMANCE

(Presented by Barbados)

EXECUTIVE SUMMARY
The paper provides details of the faults reported and operational errors evident in Barbados since the last Ecar /NTG meeting in Martinique. Eighteen (18%) Per cent of faults were voice related but none were major failures. Overall the voice system remained reliable. Seventy three (73%) of the faults reported were Data or Data Equipment related. These problems were experienced on both the SPATIA and CADAS systems.

Action:	Action is suggested in section 3
Strategic Objectives:	• Safety • Air Navigation Capacity and Efficiency • Environmental Protection
References:	• Fourth Eastern Caribbean Network Technical Group and Second Eastern Caribbean Radar Data Sharing Adhoc Group Meetings (E/CAR/NTG/4- E/CAR/RD/2), Martinique, French Antilles, France, 17 to 18 June 2013

1.   Introduction

1.1   This paper details the types of problems experienced by Civil Aviation in Barbados between June and October 15 2014 on the MPLS System and associated equipment and provides operational assessment of the operation of the MPLS Link as experienced by Civil Aviation in Barbados.

2.   Discussion

Operational Errors Experienced by AIS Office During 2014

2.1   The following Operational Errors associated with the SPATIA and CADAS Equipment as described by operational personnel in the AIS Office are detailed below.

- **February:**

SPATIA kept logging off after periods of inactivity and had to be restarted each time.

- **April:**

The CADAS printer printed messages with a dark smudgy shadow. As the messages printed from left to right the print went from dark to light.
The printer continues to be problematic.

- **June:**

CADAS became frozen and was therefore unresponsive to commands whenever the number pad on the keyboard was used. The system remained frozen in some cases for at least 20 minutes and then recovered.

- **October**

An error message window was constantly appearing on the SPATIA, "unknown exception occurred com.ubitech.aimaisservices.fpl.object UIhelpher"
Fault reports were submitted for these occurrences.

2.2   During this period it was observed that sometimes flight plans addressed to TBPBZTZX from the SPATIA were not being received on either CADAS or ATOM. The flight plans were then entered on the CADAS. It was also observed that SPATIA does not recognize some ICAO Location Indicators, e.g. KLEE.

Faults Reported between June 27 2013 and October 15 2014

2.3   A Table of logged fault reports since the last E/CAR Meeting and covering the period 27 June to 15 October is presented below:

<u>Faults Reported by Barbados June 27 2013-Oct 15 2014</u>						
Date	Fault report #	Fault reported	Equipment/ Circuit	Time fault Discovered	time reported	Time reported resolved
2013						
13/06/27	601	SPATIA ECAR unserviceable	DATA	14:35	15:45	
13 07 03	11	Freezing when txing FPLs. CADAS also Unserviceable (U/S)	SPATIA & CADAS		11:41	
13/09/11	901	SPATIA Query and CADAS Deleting of MSG Intermittent.	DATA	17:00	17:18	
13/10/26	1001	CADAS unserviceable. Displaying blank screen	DATA	13:03	Not Indicated	
13/11/27	1101	SPATIA & AMHS connection lost with ATOM	DATA	15:40	Not Indicated	
13/11/29	1102	Ecar Extension 6003 U/S	Voice Circuit1101	13:39	Not Indicated	
2014						

14/02/03	201	No MSG received via AFTNline to the ATOM system since 1233 UTC today	DATA	19:54	Not Indicated	
14/02/27	202	SPATIA system keeps logging out after periods of inactivity	DATA	14:30		
14/06/20	604	CADAS unserviceable. CADAS frozen and unresponsive to commands	DATA	13:00	14:00	
14/09/19	903	No contact with TFFF on ECAR Extn 6401/6402/6403/6404. No dial tone heard on TBPB line 6003	SPEECH	12:30	13:31	
14/10/10	1002	Error message window appearing constantly on SPATIA (Unknown exception occurred …"com.ubitech.aim.aiss services.fpl.FplObjectUlHelper').	DATA	18:30	1850	

2.4   There were a total of eleven faults reported for the period two of which were voice related. These however affected only one out of the four telephone circuits /numbers in use in Barbados in the first instance and in the second instance affected connection to only one territory using the 6400 number assignment. Nine of the eleven faults were related to the data circuits or Equipment.

Conclusions:

2.5   From the table of faults reported and the operational errors experienced by AIS in Barbados, the following conclusions may be drawn.

- **Conclusion 1:** problems experienced are primarily related to the DATA aspect of the system. Seventy three per cent (73%) Data Related.
- **Conclusion 2:** The problems generally appear to occur in the afternoon.
- **Conclusion 3:** The two recorded faults associated with the voice circuits/service represent eighteen per cent (18%) of reported faults. These were however not major failures of the voice service.
- **Conclusion 4:** The voice service/circuit continued to be reliable.
- **Conclusion 5:** There are some operational problems on data services and equipment experienced in Barbados that need to be analysed and resolved.

3.   Suggested Actions

3.1   The Meeting is invited to:

a)   take note of the information presented in this paper;

b)   analyze the failure reports for identifying improvements; and

c)   take any other action that the meeting considers appropriate, following the conclusions indicated in Section 2.

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