International Civil Aviation Organization
NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE
Twenty-Ninth Eastern Caribbean Working Group Meeting (29 E/CAR WG)
Saint Vincent and the Grenadines, 9 to 13 May 2005

Agenda Item 3 **Specific Air Navigation Activities and Developments**
3.6 Communications, Navigation and Surveillance (CNS)

E/CAR DIGITAL NETWORK

(Presented by Trinidad and Tobago)

SUMMARY

This working paper advises the E/CAR WG on the status of the Eastern Caribbean Digital Network.

References:

- Summary of Discussions and Conclusions 28th Eastern Caribbean Informal Working Group Meeting, Montserrat, 2004
- Summary of Discussions and Conclusions Special E/CAR Communication, Navigation and Surveillance Meeting, Trinidad, 20-22 October, 2004
- E/CAR/DCA/18, Trinidad, December 2003

1. Introduction

1.1 The E/CAR Digital Network has been problematic since it's inception in 2000. The service provider, Telecommunications Services of Trinidad and Tobago (TSTT) has met several times over the years with the users to identify and rectify problems with the network.

1.2 At the Twenty Eight Eastern Caribbean Working Group Meeting (28 E/CAR WG) in Montserrat, Intercaribbean Aeronautical Communications Limited (IACL) presented WP/24 entitled "Design Description of the Upgraded E/CAR AFS Network" This Working Paper gave a brief analysis of the existing E/CAR Digital AFS Network and the problems plaguing both the Voice and AFTN circuits.

1.3 WP/24 further advised the Meeting of a decision taken to engage Cable and Wireless (West Indies) Limited (C&W) to provide and manage the Network, and indicated that the main advantage was that this company has a presence in all the E/CAR territories, which would be time efficient for first line maintenance. C&W proposed the migration to a Frame Relay platform, which would have little effect on the existing end equipment and provide a more reliable and expanded medium for the transmission of data.

1.4 Radar data sharing was also highlighted and the need in the first instance to provide a circuit out of Martinique to Hewannora and George Charles Airport in St Lucia.

2. Discussion

2.1 Intercaribbean Aeronautical Communications Limited (IACL) discontinued its services with effect from February 1, 2005.

2.2 In the meanwhile, the TTCAA will carry out the necessary liaison between the E/CAR States and French Territories and TSTT in fault reporting and resolution.

2.3 In the most recent meeting with TSTT on 11 January, 2005, several areas were identified with on-going problems:

- Redundancy of transmitters and receivers at the high sites in Antigua, Barbados and Tobago.
- Lack of requested monthly reports from TSTT on the current status of the site equipment, time to resolution on faults and outages with duration of un-serviceability.
- No response on the request for circuit design information on routes, scope of equipment and signal paths.
- Redundant paths for the E/CAR and A3/A7 circuits from Piarco to Port of Spain
- Monitoring and network management of the network.
- Inadequate fault reporting and resolution procedures.
- Routine preventative maintenance procedures.

2.4 TSTT pointed out that no new expenditure on the network will be scheduled due to plans by IACL to transfer responsibility of the networks to Cable & Wireless and also noted that there was no current contract in place for the provision of services from TSTT.

2.5 TSTT confirmed their commitment despite these issues, to provide continuing support to the existing networks and to ensure a reliable and safe service.

2.6 Over the past three months, TSTT has carried out extensive work on the networks and the current status is:

- <u>AFTN</u>

  Atlanta: Operational. The last failure was identified as outside of TSTT's domain.

- <u>A3/A7 Remote High Sites</u>

  Antigua: Both transmitters, both receivers operational. No capability of remote automatic changeover of Transmitters and Receivers. Maintenance is on-going.

  Barbados: A7 - both Transmitters and Receivers and changeover operational

  A3 – One Transmitter and both Receivers operational therefore automatic changeover is suspended until the second transmitter is repaired.

  St. Lucia: A3 - both Transmitters and Receivers and changeover operational.

  Trinidad: A3/A7 - both Transmitters and Receivers and changeover operational

Tobago: A7 – both Transmitters and Receivers and changeover operational
A3 – One Transmitter and both Receivers operational therefore automatic changeover is suspended until the second transmitter is repaired.

- Point-to-Point
  France: link errors identified with the Martinique circuit. Maintenance is on-going.
  Other circuits: operational

2.7 To provide an efficient a service as possible, the fault reporting form at Appendix A was generated and is hereby submitted to this Meeting for consensus and adoption.

3. Conclusion

3.1 It is expected that, when a mutual decision is reached regarding the direction that the E/CAR network will precede in terms of service provider and the type of network, meetings will be held with the selected service provider to discuss and finalize the operational requirements of each State and Territory.

4. Suggested action

4.1 The meeting is invited to take note of the information presented in this working paper.

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