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NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE
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Agenda Item 3: Air Navigation Matters
3.6 Other Air Navigation Issues

CURRENT STATUS OF THE FEDERAL AVIATION ADMINISTRATION TELECOMMUNICATIONS PROGRAMS

(Presented by the United States)

Summary
This Information Paper presents information on the current status of the FAA's Telecommunications Programs.

References
- MEVA TMG reports
- MEVA/REDDIG Interconnection Meetings reports
- MEVA/REDDIG Task Force report
- ATM/CNS ATN Task Force

1. Introduction

1.1 The Federal Aviation Administration (FAA) is in the midst of reorganizing its telecommunication resources in order to streamline and make more efficient use of its assets. This Information Paper provides a brief synopsis of the current status of the FAA's Programs and activities in the Caribbean and South American Region (CAR/SAM)

2. MEVA II

2.1 Americom Government Services (AGS) has completed the implementation of the MEVA II network.
The Member States and International Organizations are Bahamas (Nassau and Freeport), Netherlands Antilles (Curacao and St Maarten), Aruba, Dominican Republic, Haiti, Cuba, Jamaica, Cayman Islands, Panama, COCESNA and FAA (Miami and San Juan).

2.2 The initial MEVA VSAT network was implemented in 1996 using Single Carrier per Channel/ Demand Assigned Multiple Access (SCPC/DAMA). The MEVA Technical Management Group (TMG) integrated by experts from States, Territories and an International Organization recognized the need to upgrade the network in order to accommodate existing and new requirements and to facilitate the introduction of aeronautical telecommunications network (ATN). A Request for Information (RFI) was issued and subsequently a Request for Proposal (RFP) for the MEVA II. The MEVA II Service Provider was selected and approved by the Civil Aviation Directors during the MEVA/10 Meeting held in Mexico City 13-15 December 2004.

2.3 The MEVA II network is a Time Division Multiplex Access (TDMA) Frame Relay network based on a totally integrated C-band VSAT/TDMA/Frame Relay satellite service solution. The network is capable of offering bandwidth-on-demand, Voice and TCP/IP interfaces, and fully meshed services. The VSAT network is also capable of being interconnected via the PAS-1R satellite with various designated VSAT earth station terminals in the REDDIG VSAT aeronautical telecommunications network in South America.

3. MEVA II / REDDIG Interconnection

3.1 The FAA participated in the 3rd MEVA II/REDDIG Interconnection Meeting held in Mexico City, Mexico on 26-28 July 2006 and the M/R Task Force Meeting held in Lima, Peru on 2-3 October 2006 composed by the following States, International Organization and enterprise: Argentina, Brazil, Colombia, United States, Venezuela, COCESNA, Americom Government Services (AGS), and the REDDIG Administrator, to analyze aspects related with control and technical-operational management, financial, security, and other institutional aspects. The M/R Meeting agreed that the best solution would be integration of both networks; however the most feasible solution option during initial stage would be interconnection of networks. The M/R Task Force is conducting an in-depth analysis of the interconnection solutions which would implement a MEVA II MODEM in Venezuela and Colombia, and a REDDIG Modem in COCESNA.

3.3 The FAA supports the interconnection of the networks because it would satisfy the commitments to the CAR/SAM Aeronautical Community in a cost effective manner. MEVA II is technologically compatible with REDDIG, rendering the interconnection easily feasible. The solution chosen should not reduce the performance of MEVA II - The Service Level Agreement (SLA) that the Service Provider agreed upon is the guarantee that the network will perform according to specifications.

4. AMHS Implementation

4.1 FAA has an Automatic Message Handling System (AMHS) prototype installed in Salt Lake City, Utah, which has been operational since 2005 that supports Asia Pacific connections and is planning to expand the AMHS service to Atlanta (ATL) Center to support facility and network diversification. This will ensure SLC and ATL Centers can backup one another. ATL will support AMHS service to Europe, South America and Caribbean regions in September 2007.

5. Eastern Caribbean Interconnection

5.1 The Trinidad and Tobago Civil Aviation Authority and United States Federal Aviation Administration have begun a project to reconfigure the Aeronautical Fixed Telecommunications Network (AFTN) between the two countries.

5.2 The first phase of the process will remove the X.25 protocol Packet Assembler Disassembler (PAD) that is currently in front of the Trinidad Thales AFTN Switch. Once this PAD is removed the switch in Trinidad will communicate with the FAA NADIN Network through the legacy telecommunications connectivity.

5.3 The second phase of the process will begin in early 2007 and will consist of a change from X.25 protocol to Transmission Control Protocol / Internet Protocol (TCP/IP) and will terminate at the new US FAA NADIN MSN which is also multi-protocol capable. This phase is in the engineering and planning stage, and the telecommunications path has not been determined at this time.

6. Conclusion

6.1 The FAA is actively involved in the CAR/SAM Region and supports the proliferation of new technology that can improve the existing telecommunication systems in support of Air Traffic Services.

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