INTERNATIONAL CIVIL AVIATION ORGANIZATION

CAR/SAM 01/01 CNS Informal Meeting

(Bogota, 9 to 11 October 2001)

Agenda Item 3 Review of proposals to satisfy AFS communications requirements taking into consideration CAR/SAM/3 RAN meeting Conclusion 9/8

Summary

This working paper presents a proposal from the Netherlands Antilles with regard to AFS communications with Barranquilla ACC resulting from a study of the possibility of using the Colombian V-SAT network.

(Presented by Netherlands Antilles)

1. BACKGROUND

1.1 During the CAR/SAM 01/00 held in Mexico, a technical financial study of the various solutions options have to be performed with regard to the requirements established in the FASID document for the ATS and the Conclusion 9/8. The Administration of the Netherlands Antilles has strived for many years to improve the quality of air navigation service it has been rendering to the Civil Aviation community.

1.2 Curaçao ACC has been steadily improving the quality of direct speech circuits with the various adjacent ACC's. The ACC circuits with Kingston, Haiti, Sto. Domingo and San Juan comply with all the requirements of the FASID document and ICAO SARPs through the use of the MEVA V-SAT network. Also the AFTN circuit has been upgraded to NADIN-II, United States, via the MEVA network.

1.3 The VHF coverage has been improved through the implementation of new equipment with high gain directional antennas.

1.4 Furthermore a new Air Traffic Control building is being constructed to house a new ATS infrastructure including a new Radar system. This will consist of:

- An Air Traffic Control System with state of the art technology
- An automated AFTN System
- A 120 NM range PSR with
- A 256 NM range MSSR with fully automated equipment upgradeable to Mode-S.

2. ANALYSIS

2.1 At present Curaçao ACC has voice communications with Maiquetia and Barranquilla. The Maiquetia ATS speech circuit is an analog microwave LTF link with a high reliability.

2.2 Curaçao ACC also maintains a 50 Baud AFTN line with Maiquetia. Although this circuit is not in the FASID requirements, Curaçao is looking to improve this circuit.

2.3 The Barranquilla ATS speech circuit is a satellite link through the Bogota voice switch. In the past this circuit showed some deficiencies, but has improved considerably. The monthly cost to operate this circuit is US$ 2650.00. Curaçao has studied the proposal of Colombia to install a V-SAT node on the Colombian Network at Curaçao, excluding civil works, installation, training and maintenance costs. Since no cost figures are available it is estimated that the cost of implementing and maintaining this single ATS speech circuit could exceed the present operating costs.

3. PROPOSAL

3.1 In our effort to provide an optimum solution for the AFS communications requirements, Curaçao would like the Meeting to consider the following proposal:

The Netherlands Antilles proposes the Meeting to study the implementation and cost-benefit analysis of a MEVA V-SAT station at Barranquilla which would support not only the Curaçao ATS speech circuit, but also the Kingston and Panama speech circuits.

4. SUGGESTED ACTION

4.1 The Meeting is invited to:

a] take note of the information presented in this working paper

b] examine the analysis and proposal contained in paragraph 2 and 3 respectively, and

c] analyze and determine the corresponding action to obtain the optimum solution.

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