

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
SOUTH AMERICAN OFFICE**

**SECOND MEETING OF THE INFORMAL COORDINATION GROUP OF THE EAST
CARIBBEAN AND NORTH EASTERN SOUTH AMERICAN
(E-CAR/SAM-NE ICG/2)**

(Caracas, Venezuela, 1 to 5 December 2003)

Agenda Item 2: Review of CNS matters

**a) Review of the status of implementation of the CAR/SAM AIS/ATM/CNS
02/00 Informal Meeting Conclusions related to the CNS area**

(presented by the Secretariat)

Summary

This working paper describes the status of implementation of the conclusions related with CNS aspects, formulated during the CAR/SAM AIS/ATM/CNS 02/00 informal meeting.

Reference:

- Report of the CAR/SAM AIS/ATM/CNS 02/00 informal meeting (Cayenne, French Guiana, 27 to 29 March 2001).

1. Background

1.1 Eight conclusions were formulated in the CNS area during the CAR/SAM AIS/ATM/CNS 02/00 informal meeting. A list is presented in **Appendix A** to this working paper.

2. Analysis of the conclusions

2.1 CNS matters were reviewed under Agenda Item 3 of the CAR/SAM AIS/ATM/CNS 02/00 informal meeting, taking into consideration the deficiencies in the Aeronautical Fixed Service (AFS), the Aeronautical Mobile Service (AMS) and surveillance and radar implementation plans.

2.2 Under AFS, the degree of implementation and operation of the AFTN system was analysed, as well as the status and degree of implementation of ATS speech communications.

2.3 With regard to the AFTN systems, the meeting, upon analysing its degree of implementation in the region under analysis, considered the necessity to improve the Guyana switching centre. Guyana, at the time of the meeting, had only one PC terminal, as a message switching centre, connected to the Piarco message switching centre (Trinidad & Tobago).

2.4 In this respect, Conclusion 1/14 was formulated (Improvements in the Guyana AFTN centre), urging the Guyana delegation to install a new message switching centre having the appropriate capacity to support domestic and international AFTN traffic.

2.5 On this subject, Guyana has elaborated, together with ICAO, an action plan for the implementation of the new CNS systems, and, regarding the AFTN system, has considered that the equipment necessary for Guyana would have to be composed, as a minimum, by a switching centre based on PCs, plus an initial number of six PC terminals to be installed at the ACC, AIS, MET, SUP and TWR units at Timehri and Ogle. The end of 2002 was estimated as the most convenient date of implementation, since this would coincide with the operation of the South American Digital Network, which would permit direct AFTN message exchange with all adjacent FIRs, instead of doing it indirectly through the Piarco AFTN switching centre.

2.6 With REDDIG in operation (end of September 2003), Guyana installed PC terminals with AFTN application, to communicate with Paramaribo, Manaus and Maiquetia. It is expected that Guyana inform the meeting on the progress achieved to date with regard to the implementation of Conclusion 1/14.

2.7 Conclusion 1/15 (Implementation of a Maiquetía - Piarco digital circuit) was formulated to increase the availability of AFTN voice and data communications between Venezuela and Trinidad & Tobago, as well as provide the physical means for the interconnection of the South American digital network (REDDIG) with the Eastern Caribbean digital network (E-CAR).

2.8 In this respect, the meeting expects that the delegations of Trinidad & Tobago and Venezuela inform on the progress achieved.

2.9 Conclusion 1/16 (Economic contribution to the REDDIG) indicates the need that all States provide the corresponding quotas so as not to delay the implementation of the REDDIG, under RLA/98/019 project. In this regard, since all States that have made payment of their corresponding quotas, this conclusion can be considered as concluded.

2.10 Conclusion 1/17 (Implementation of VHF speech channels and coverage analysis) urges States to implement the number of VHF speech communication channels specified in Table CNS-2A of the CAR/SAM Air Navigation Plan; and analyze the VHF coverage in the subregion under analysis.

2.11 It is expected that the meeting, based on information provided by States, can identify air/ground VHF coverage with the aim of determining whether these guarantee the minimum levels of the FIRs of the international ATS routes.

2.12 In order to guarantee 24-hour HF coverage for the enroute mobile communications service, Conclusion 1/19 (Implementation of HF speech channels) was established. In this regard, the meeting expects to receive information with regard to the progress obtained.

2.13 Conclusion 1/19 (Information requirements) requested information from States of the subregion related to their implementation plans for radar surveillance systems; 24 bits aircraft address allocation plans; Implementation plans for radioaids systems; and national programmes for the holding of navaid flight tests. This information was to be sent to the ICAO Regional Office, but to date no information has been received. It is expected that during the meeting, States provide the information requested.

2.14 With regard to Conclusion 1/20 (Radar data sharing), the meeting expects to take note of the bilateral or multilateral agreements taken in the subregion.

2.15 Conclusion 1/21 (AFTN procedure in distress messages) originated due to the problems presented in the Cayenne (French Guiana) message switching Centre upon being unable to process correctly the high priority messages received therein. The problem has been solved.

3. **Action suggested**

3.1 The meeting is invited to take note of the information provided in this paper; and analyze the status of compliance of the conclusions presented in Appendices A and B.

APPENDIX A

LIST OF CNS CONCLUSIONS FORMULATED AT THE CAR/SAM AIS/ATM/CNS 02/00 INFORMAL MEETING

Conclusion 1/14 - Improvements in the Guyana AFTN centre

That the Guyana Administration, in order to provide greater support to air traffic services, do its utmost to install a new message switching centre that allows for the exchange of information using AFTN and AMHS procedures, according to the capacity required and providing an AFTN circuit with Port of Spain with an operating capacity of 2,400 bit/sec, IA-5 format and the X.25 communication protocol.

Conclusion 1/15 - Implementation of a Maiquetía - Piarco digital circuit

That the Administrations of Venezuela and Trinidad and Tobago take the necessary measures to improve the AFTN circuit between Maiquetía and Piarco, as specified in table CNS-1A, Volume II of the ANP. To that end, it is recommended that a 64-Kbit/sec ground digital circuit be installed to support ATS speech communication requirements between the two centres and permit interconnection between the REDDIG and the Eastern Caribbean digital network.

Conclusion 1/16 - Economic contribution to the REDDIG

That the SAM States of the Subregion that have not yet made their economic contributions to the RLA /98/019 project do their utmost in this regard, so that the REDDIG may be implemented in its entirety and thus permit the required improvements in AFS services to be made for a safe and efficient air traffic control based on a favourable cost-benefit analysis.

Conclusion 1/17 - Implementation of VHF speech channels and coverage analysis

That Brazil, French Guiana, Guyana, Suriname, Trinidad and Tobago, and Venezuela do their utmost to implement the number of VHF speech communication channels specified in Table CNS-2A, column 3 of the CAR/SAM Air Navigation Plan, Volume II – FASID; moreover, when analysing the existing ground-air VHF coverage in the Eastern CAR/SAM Subregion, that they deal with any shortcomings and deficiencies that could arise.

Conclusion 1/18 - Implementation of HF speech channels

That Brazil, French Guiana, Guyana, Suriname, Trinidad and Tobago, and Venezuela take appropriate measures to implement the number of HF channels required for the speech communications of en route mobile service, as specified in Table CNS - 2B of the CAR/SAM Air Navigation Plan, Volume II - FASID, so that each station can offer 24-hour coverage.

Conclusion 1/19 - Information requirements

That Brazil, French Guiana, Guyana, Suriname, Trinidad & Tobago and Venezuela send to the respective Regional Offices and not later than 30 May 2001, the following updated information:

- a) Implementation plans for radar surveillance systems;
- b) 24 bits aircraft address allocation plans;
- c) Implementation plans for radioaids systems; and
- d) National programmes for the holding of navaid flight tests.

Conclusion 1/20 - Radar data sharing

That Brazil, French Guiana, Guyana, Suriname, Trinidad & Tobago and Venezuela, with the aim of facilitating the implementation of the radar surveillance services in a safe and cost/efficient manner, take into consideration the possibility of establishing bilateral or multilateral agreements to share, where possible, radar data between neighbouring States ATS centres and use a common radar format and communications protocol for the exchange of radar data.

Conclusion 1/21 - AFTN procedure in distress messages

That Brazil, French Guiana, Guyana, Suriname, Trinidad & Tobago and Venezuela, upon sending distress, alarm and urgent AFTN messages considered of maximum priority (SS), comply with specifications in Annex 10, Volume II, Sections 4.4.4.3 and 4.4.4.5 (lack of line feed signal after the priority alarm).

APPENDIX B

SUMMARY OF CAR/SAM AIS/ATM/CNS 02/00 CONCLUSIONS

CONC. NUMBER	TITLE	STATUS	REMARKS
1/14	Improvements in the Guyana AFTN centre	Valid	Improvements foreseen for mid 2004.
1/15	Implementation of a Maiquetía - Piarco digital circuit	Valid	There are no plans in this respect.
1/16	Economic contribution to the REDDIG	Concluded	All REDDIG participating States have cancelled their corresponding quotas.
1/17	Implementation of VHF speech channels and coverage analysis	Valid	It has not been totally implemented.
1/18	Implementation of HF speech channels	Valid	It has not been totally implemented.
1/19	Information requirements	Valid	Information still not provided.
1/20	Radar data sharing	Valid	No radar data sharing has happened among States of the subregion. Conclusion GREPECAS !!/47 recommends the use of Asterix protocol as regional protocol for the exchange of radar data.
1/21	AFTN procedure in distress messages	Complied	Solved during first E-CAR/SAM meeting

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