

Agenda Item 2: Review of ATM relevant matters, considering:**a) Application of the minimum longitudinal separation**

2.1 The meeting noted that the information presented by the Secretariat with regard to the different recommendations and conclusions drafted in the different forums of the CAR and SAM Regions (CAR/SAM/3 RAN Meeting, NAM/CAR ATS 1/00 Meeting, ATM/SAR 02/00 SAM Meeting) regarding the uniform application of 10-minute longitudinal separation minimum using the mach number technique (MNT) and/or 80 NM RNAV among aircraft at the same flight level and operating in the CAR and SAM Regions (except for ATS routes from and to Europe).

2.2 On this matter, States recognized that, in order to have an ideal structure of ATS routes as the one that CAR and SAM States are determined to achieve, the adoption of uniform criteria and procedures is of utmost importance.

2.3 It was also recognized that the utilization of 10-minute longitudinal separation minimum is an important and essential element to be established. This means that, while there are airspace sectors of routes segments in which greater separations either in time or distance, no matter what their dimension is, it would be a difficult matter to undertake which will hinder the adequateness of the CAR/SAM ATS routes network undertaken by the States and at the same time, the current needs of the users of international civil aviation.

2.4 In relation with the afore mentioned, the meeting, after a thorough analysis of the basic factors which might somehow hinder the application of this longitudinal separation minimum among international ATS routes affecting both regions, such as: air navigation and surveillance precision factors, organizational and structural factors in ATS, including technical characteristics and reliability of AFS and AMS communications available systems, and human factors, concluded that the basic conditions for its implementations would be provided, and therefore formulated the following conclusion:

Conclusion 1/4 Implementation of the 10-minute longitudinal separation minimum using the MNT

That Brazil, French Guiana, Guyana, Suriname, Trinidad and Tobago and Venezuela:

- a) starting on **12 July 2001**, apply a **10-minute** longitudinal separation minimum on the international ATS routes corresponding to the FIRs involved, using the Mach number technique;
- b) review and update the existing Letters of Operational Agreement between the ACCs involved, bearing in mind the safety levels that must be maintained when applying such separation;

- c) take the relevant action to solve those technical problems that could hinder the implementation of this longitudinal separation on the aforementioned date; and
- d) in the event that they cannot meet the necessary requirements for the implementation of the 10-minute longitudinal separation, shall provide such information to the relevant Regional Office no later than **12 June 2001** to enable co-ordinations for postponing the implementation of said separation.

b) Contingency plans

2.5 The meeting recalled that, in compliance with Resolution A23-12 of the Assembly, and after the survey carried out by the Air Navigation Commission and the consultations made with States and international organizations concerned, ICAO Council approved the guidelines for contingency measures which should be applied in case of interruption of air traffic services and corresponding support systems so that, under these circumstances, the main international routes continue to be available.

2.6 The civil aviation administrations participating in this meeting recognized that during 1999 the States worked hardily in the Y2K problem and prepared contingency measures which would permit the provision of a safe, orderly and efficient air traffic control service, in the areas under his responsibility, beyond the difficulties which could arise in the change of the millennium. This effort was evident in the preparation of the National Contingency Plans and the CAR/SAM Regional Contingency Plan.

2.7 The meeting received information from France with regard to the concept of contingency plans used by its administration as well as some proposals with re-assignment of responsibilities in the Cayenne airspace for the case of interruption of an ATS and/or related services.

2.8 Finally, and taking into consideration the information presented, it was concluded that making an additional effort would result in the development of national contingency plans of the States involved and further summarizing them in a sub-regional contingency plan which could be used when the circumstances so merit. Therefore, the following conclusion was formulated:

Conclusion 1/5 Contingency plans

That, taking into account the action plan shown in **Appendix A** to this part of the report, Brazil, French Guiana, Guyana, Suriname, Trinidad and Tobago and Venezuela:

- a) prepare their national ATS contingency plans and co-ordinate with their neighbouring States the most appropriate measures for their harmonisation; and
- b) forward said plans to the relevant ICAO Regional Office.

c) Selection of the language for coordination purposes between ATS Units at Rochambeau and Belem FIRs

2.9 The meeting noted the existing difficulties to carry out the coordinations between Cayenne and Belem ACCs, due to the inappropriate use of the language, which presented a potential risk for air navigation safety. The meeting emphasized that these difficulties did not only correspond to the aforementioned ACCs but to all the States of the sub-region since within that framework there were 5 languages used (Dutch, English, French, Portuguese and Spanish), which made the coordination among ATS units more difficult.

2.10 The delegates made a deeper analysis on this issue, taking into account the fact that, in accordance to the ATS incidents reported by users, among the causes normally pointed out are the inadequate use of the aeronautical phraseology, as well as the insufficient knowledge of the English language by ATC personnel of those States which mother tongue was not the English language.

2.11 All the delegations considered it pertinent that the States which mother tongue is not the English language, had a regular training programme of this language, recognizing at the same time that, in order to minimize this problem, the States should have a clear policy as regards the required level of English knowledge for personnel who will work in the civil aviation administrations, at the ATS units. In virtue of the aforementioned, the meeting formulated the following conclusion:

Conclusion 1/6 Use of the English language for co-ordinations between ATS units

That, taking into account the difficulties that exist with the language used by air traffic controllers during operational co-ordinations, Brazil, French Guyana, Guyana, Trinidad and Tobago, Suriname and Venezuela:

- a) use English as the only language for co-ordinating the traffic that crosses the boundaries of their FIRs;
 - b) if their mother tongue is not English, take the relevant action to conduct periodical refresher courses to train their personnel on the use of the English language; and
 - c) take the necessary measures to make sure that the new personnel hired by the administration to work at the ATC units is adequately proficient in the English language.
- d) Implementation of ATS routes**

Cayenne-Macapá and Cayenne-Fortaleza routes

2.12 The meeting recalled that during the SAM Informal Meeting 64/96 held in Belem in July 1996, Brazil and France agreed to implement ATS routes Cayenne-Macapá and Cayenne-Fortaleza. Notwithstanding the above, note was taken that this implementation did not proceed and until the date of the meeting no information had been received by the Brazilian administration as regards the implementation date.

2.13 The administrations of Brazil and France agreed on the fact that, due to the time elapsed since the implementation agreed up to the date, it would be convenient to review again the requirements for its implementation and agreed, if such were the case, to reinstate in the near future a new implementation process of ATS routes concerned. In the light of the above, the following conclusion was formulated:

Conclusion 1/7 Non-implementation of the Cayenne-Macapa and Cayenne-Fortaleza routes

Since the Cayenne-Macapa and the Cayenne-Fortaleza routes have not been implemented to date, the Brazilian and French administrations agreed to discontinue the implementation process.

Paramaribo (Suriname)-Bridgetown (Barbados)

2.14 The meeting also noted the proposal from Suriname to establish an ATS route between Paramaribo (Suriname) and Bridgetown (Barbados), since there has been an increase of regular and non-regular flights between both cities along the last years. Likewise, note was taken that Suriname Airways shall start to fly again between both cities as of 1 April 2001 twice a week, also expecting air cargo flights in such segment.

2.15 In view that not all the information required to carry out an implementation survey of such route, as well as all parties involved were present, the meeting requested Suriname to send to all States involved as much information as possible on this issue, which will permit the adoption of a final decision on this proposal.

2.16 Likewise, and taking into consideration that a meeting of the Caribbean Eastern will be carried out in May 2001, the SAM Regional Office was requested to contact the NACC Regional Office in order that Guyana, Suriname and Venezuela were invited to participate in the above-mentioned meeting.

2.17 In accordance with the above, the meeting formulated the following conclusions:

Conclusion 1/8 - Implementation of an ATS route between Paramaribo and Barbados

That Suriname provide the States involved in this ATS route as much information as possible so that they can examine this proposal in detail and take the relevant decision.

Conclusion 1/9 - Participation of Guyana, Suriname and Venezuela at the next Eastern Caribbean meeting

That the ICAO SAM Regional Office co-ordinate with the NACC Regional Office for sending invitations to Guyana, Suriname and Venezuela for the next Eastern Caribbean meeting to be held in Grenada on 7-11 May 2001, where they will be able to discuss the implementation, among other matters, of the Paramaribo-Barbados ATS route, and every CNS/ATM matter.

e) Designation of the ATS unit in charge of ATS route UB 680 in the corresponding DIMAS – ATITA segment

2.18 The meeting noted that, in agreement with the letter of operational agreement between Cayenne and Paramaribo, the ATS services in ATS route UB680 flying over French Guyana are provided by Paramaribo ACC between DIMAS and ATITA. The coordination of flights in ATS route UL306 to DIMAS is carried out by Cayenne ACC with Paramaribo ACC and Belem ACC, to avoid any conflict.

2.19 In order to improve the current situation, France requested Brazil and Suriname to be provided with statistical information of aircraft that operated in ATS route UB680 above mentioned. In virtue of the above, the meeting adopted the following conclusion:

Conclusion 1/10 Statistical information on route UB 680

That, for statistical purposes, Brazil and Suriname provide the French administration with the following information on the traffic operating on ATS route UB 680 during the months of January, February and March 2001:

- a) date
- b) aircraft identification
- c) type of aircraft
- d) aerodrome of departure
- e) aerodrome of destination
- f) time at the corresponding reporting points
- g) flight level

f) Statistical information on aircraft movements in the area

2.20 The meeting recognized that ATS planning is a complex process which requires to keep in mind several factors many of which are not referred to or do not correspond to ATC, taking into consideration that the collection of statistical data, complete and reliable is absolutely necessary for ATM planning. This data may be used to determine the policy of short, mid and long-term planning in airspace of concern. The data related with air traffic should be as complete as possible. En-route traffic should comprise at least the volume, composition, distribution by day/hour, distribution by flight levels, occupation for preferential flight levels and any other information deemed pertinent.

2.21 On the other hand, it was also recognized that not all the CAR and SAM States have data sufficiently complete on air traffic of their interest, and even less an analysis which may indicate a growth trend of such air traffic, in order to facilitate the planning function of ATS infrastructure.

2.22 It was recalled that in other regional scopes, some exercises have been carried out, thus permitting the identification of important ATS route segments in which there is already some air traffic congestion with serious injuries for users, besides generating operational inconveniences for ATS units (ACCs) involved.

2.23 The meeting revised the forms that had been used by States to this end, taking into consideration that even though they seemed somehow difficult to fill, they might serve in principle to document the information. Afterwards it would be decided on whether or not these forms would continue to be used, or a new format would be proposed.

2.24 Likewise, the meeting received statistical information of air traffic in Rochambeau FIR for 1999 collected by the French administration, showing the monthly and annually totals as well as an increase or decrease in air operations in such FIR.

2.25 In consideration to the aforementioned, it was considered appropriate to initiate a collection of data in the concerned sub-region, which will permit an adequate implementation planning of ATM improvements and CNS elements, as required. Consequently, the meeting formulated the following conclusion:

Conclusion 1/11 Statistical data on air traffic in ATS routes

That:

- a) Brazil, Guyana, French Guiana, Suriname, Trinidad and Tobago, and Venezuela collect statistical data on air traffic in selected ATS routes that cross the common boundaries of the FIRs involved, in order to identify the route segments with an unsatisfied demand for preferred flight levels;
- b) the air traffic data be collected in the forms shown in **Appendix B** to this part of the report (Tables 1, 2, 3, and 4), considering that:
 1. the data will cover a whole week, starting on the first Monday of each quarter;
 2. the first collection of data will take place from 2 to 8 July 2001; and
- c) the data already processed be sent to the SAM Regional Office no later than the 20th day of the month in question. The Regional Office will prepare a summary of said information to be sent to the Administrations involved, within thirty days after receiving it.

g) Co-ordination of air operations in aerodromes close to FIR boundaries

2.26 The meeting considered that the coordination among ATS adjacent authorities, units and personnel, is an essential ingredient of rational planning of airspace, recalling besides that this matter is being revised within ICAO framework for long time now, with the aim to regulate the air activity in those airports located in the limits of the FIRs of adjacent States.

2.27 The meeting recalled that in the first CAR/SAM Regional Meeting (Lima, Peru, 5-28 October 1976) this matter had been dealt with and it was approved Recommendation 6/8 – Establishment of common TMAs where States were requested to establish common TMAs in those sites in which adjacent aerodromes of more than one State are located in such a way that their respective approach and departure tracks inter-cross or run through international boundaries. Further, the CAR/SAM/2 RAN Meeting, when reviewing Recommendations and Conclusions of the previous RAN meeting, considered again this Recommendation as valid.

2.28 As a consequence of the analysis made by the delegates of the meeting, it was concluded that it was necessary to arrange agreements in those adjacent airspaces where an effective coordination of ATS units were required and even in those aerodromes which do not count with ATC units, to ensure safe, orderly and efficient air operations. France presented information on those aerodromes located in Rochambeau FIR in relation with aerodromes on the side of Brazil and Suriname in which, due to their nature and location, air operations might result affected.

2.29 On the other hand, France proposed the States involved to provide as much information as possible, through the respective AIPs with regard to their aerodromes, as well as the list of aerodromes located in the adjacent States. The information required refers to geographical positions, radio frequencies, track circuits and relevant information of interest for safe operation of aircraft. This proposal generated a fruitful exchange of opinions since it was considered that the only way to publish information in the AIPs would be through the publication of the most important parts of the letters of operational agreement and/or if applicable, in approach charts.

2.30 In consideration to the aforementioned, the meeting issued the following conclusions:

Conclusion 1/12 - Letters of operational agreement between airports located near the FIR boundaries

That France and Suriname establish operational agreements where the necessary ATS coordination procedures be included, in order to guarantee safety of air operations in those airports located near the FIRs boundaries.

Conclusion 1/13 - Publication of relevant information on airports located close to the FIRs boundaries

That States of the sub-region involved publish in the part corresponding to their AIPs, the most important information of aerodromes and neighbour aerodromes located close to the FIRs boundaries.

APPENDIX A

Action Plan for the development of the national contingency plans of Brazil, French Guiana, Guyana, Suriname, Trinidad and Tobago and Venezuela and the sub-regional contingency plan for Brazil, Guyana, French Guiana, Suriname, Trinidad and Tobago and Venezuela

This action plan consists of five phases:

- 1) Development of national contingency plans
- 2) Harmonisation of national plans with neighbouring States
- 3) Delivery of national contingency plans to the respective Regional Offices
- 4) Publication of national contingency plans
- 5) Development and distribution of the sub-regional contingency plan for Brazil, French Guiana, Guyana, Suriname, Trinidad and Tobago and Venezuela

Development of national contingency plans

In this phase, the States shall complete the respective national contingency plans. To this end, they may use the Y2K Contingency Plan as a basis. The target date is **21 December 2001**.

Harmonisation of national plans with neighbouring States

During this phase, States shall co-ordinate as necessary with their neighbouring States so as to harmonise their national plans. The harmonisation of contingency plans shall be done through the exchange of information via e-mail or through bilateral or multilateral meetings, as applicable. The target date is **30 July 2002**.

Delivery of national contingency plans to the respective Regional Offices

States shall deliver the contingency plans to the respective Regional Offices by **15 August 2002**.

Publication of national contingency plans

The States of the Sub-region shall publish their contingency plans by the AIRAC date of **5 September 2002**.

Development and distribution of the sub-regional contingency plan for Brazil, French Guiana, Guyana, Suriname, Trinidad and Tobago and Venezuela

In this phase, the CAR/SAM Regional Offices shall prepare the sub-regional contingency plan for the area in question. This plan shall be distributed to the States by **3 October 2002**.

Action Plan

Phase	Date	Remarks
Development of national contingency plans	21/12/01	
Harmonisation of national contingency plans with neighbouring States	30/07/02	
Delivery of national contingency plans to the respective Regional Offices	15/08/02	
Publication of national contingency plans	5/09/02	AIRAC date
Development and distribution of the sub-regional contingency plan for Brazil, French Guiana, Guyana, Suriname, Trinidad and Tobago and Venezuela	3/10/02	AIRAC date

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APPENDIX B

TABLE 1
Statistics on air traffic between theandFIRs
Air traffic distribution in the.....,, and ATS routes, by day/time
FIR: _____ ROUTE: _____ WEEK: _____

-Day	1		2		3		4		5		6		7		Total Flights
RP															
UTC Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	
00-01															
01-02															
02-03															
03-04															
04-05															
05-06															
06-07															
07-08															
08-09															
09-10															
10-11															
11-12															
12-13															
13-14															
14-15															
15-16															
16-17															
17-18															
18-19															
19-20															
20-21															
21-22															
22-23															
23-24															
TOTAL															

Day: 1 MON, 2 TUE, 3 WED, 4 THU, 5 FRI, 6 SAT, 7 SUN
 SB = Southbound NB = Northbound
 RP =Reporting point (Reporting point chosen to record the traffic count)

TABLE 2

**Statistics on air traffic between theandFIRs
Air traffic distribution in the.....,, and ATS routes**

FIR: _____ **WEEK:** _____

AWY	1		2		3		4		Total Flights
RP	Reporting Point								
UTC Time	NB	SB	NB	SB	NB	SB	NB	SB	
01-02									
02-03									
03-04									
04-05									
05-06									
06-07									
07-08									
08-09									
09-10									
10-11									
11-12									
12-13									
13-14									
14-15									
15-16									
16-17									
17-18									
18-19									
19-20									
20-21									
21-22									
22-23									
23-24									
TOTAL									

SB =Southbound NB = Northbound
RP =Reporting point (Reporting point chosen to record the traffic count)

TABLE 3

**Statistics on air traffic between theandFIRs
Air traffic distribution in the.....,, and ATS routes,
by flight level**

FIR: _____

WEEK: _____

Route						
FL					TOTAL	Observations
200						
210						
220						
230						
240						
250						
260						
270						
280						
290						
310						
330						
350						
370						
390						
410						
430						
450						
Total						

TABLE 4

**Statistics on air traffic between the andFIRs
 Information on air traffic in the,, ATS routes forced to fly
 non-preferred FLs for lack of a 15-min. separation**

FIR: _____

WEEK: _____

<i>ATS Route</i>								
Day	Total Flights	CLFL /RQFL Flights	Total Flights	CLFL /RQFL Flights	Total Flights	CLFL /RQFL Flights	Total Flights	CLFL /RQFL Flights
1								
2								
3								
4								
5								
6								
7								
TOTAL								
PERCENT. %								

Notes:

- (1) Day: 1 MON, 2 TUE, 3 WED, 4 THU, 5 FRI, 6 SAT, 7 SUN
- (2) The total no. of flights is the total stated in **Table 1**.
- (3) CLFL □ RQFL: corresponds to aircraft flying non-preferred levels.

- END -