

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
SOUTH AMERICAN OFFICE**

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

(Caracas, Venezuela, 1 to 5 December 2003)

**Agenda Item 1: Review of ATM matters
c) Follow-up of ATM and SAR deficiencies identified in the area**

(Presented by the Secretariat)

Summary

This meeting has the objective that the Meeting take note of the Regional Strategy for the solution of deficiencies in air navigation and may proceed to the review of those deficiencies detected in the ATM area corresponding to the participating States.

References

- GREPECAS/11 Meeting Report, Manaus, Brazil, December 2002.
- Report of the Eight Meeting of Civil Aviation Authorities – SAM Region (RAAC/8), Buenos Aires, Argentina, April 2003.

1 Background

1.1 During the RAAC/8 Meeting, it was recalled that, in principle, the deficiencies in the air navigation area are those determined on the basis of the ICAO Air Navigation Plan, which, in case of the CAR/SAM Regions, is Doc 8733, Edition 14 that contemplates the Basic ANP and the FASID Document. These deficiencies contemplate the application of ICAO SARPs associated to such Plan.

1.2 Also the States participating in the RAAC/8 took knowledge of the follow-up carried out the ICAO Regional Office regarding Conclusion 7/13 drafted by RAAC/7 Meeting, in which States should send an Action Plan for correction of those deficiencies identified, validated and classified in that Region, not later than 31 October 2002. After several formal contacts with States, the ICAO Regional Office received only the plans of 6 States.

1.3 Also, the RAAC/8 meeting reviewed GREPECAS/11 Conclusion 11/55, in which it was established that States/Territories should develop and implement, as an urgent matter, an Action Plan for each deficiency, specifying corrective measures, the date of finalization and the assignment of the necessary resources. These plans should be submitted to ICAO not later than 30 April 2003.

1.4 It was also recalled to the Meeting, ICAO Secretary General's letter M 6/1-02/69 dated 27 September 2002, which requested States to give priority to the existing deficiencies in the Region and prepare an Action Plan to eliminate such deficiencies.

1.5 A course of action and a common States/ICAO strategy was presented to the meeting to improve the coordination procedures and the implementation of measures aimed at solving in an efficient manner the deficiencies identified by the different mechanisms considered in the methodology developed by ICAO Council. In this methodology, the importance to clearly define the corrective measures to be taken is emphasized.

1.6 In view of the above, the RAAC/8 formulated the following Conclusion:

CONCLUSION 8/10 REGIONAL STRATEGY FOR THE RESOLUTION OF DEFICIENCIES

That, in order to resolve the deficiencies in the Region:

- a) the Regional Strategy, presented in the Appendix to this part of the report, is approved; and
- b) the ICAO Regional Office, in Lima, co-ordinate, as necessary, the implementation of the strategy indicated in paragraph a) of this conclusion.

2. Analysis

2.1 According to the information collected by ICAO NACC and SAM Regional Offices, the deficiencies included as **Appendix B** to this working paper affect the ATM/SAR air navigation areas in the SAM-NE Sub-Region, Curacao and Piarco FIRs. These lists require a review by the meeting, in order update them and include additional information that may be provided by States and users.

3. Suggested action

3.1 The Meeting is invited to:

- a) Take note of **Appendix A**, review **Appendix B** of this working paper; and
- b) Develop the corresponding action plan based on the sample presented in **Appendix C** to this working paper, in order to overcome the negative impact of deficiencies on operational safety.

APPENDIX A

**UNIFORM METHODOLOGY FOR THE IDENTIFICATION, ASSESSMENT AND REPORTING OF AIR
NAVIGATION DEFICIENCIES**

(Approved by the Council on 30 November 2001)

1. INTRODUCTION

1.1 Based on the information resulting from the assessment carried out by ICAO on the input received from various regions regarding deficiencies in the air navigation field, it became evident that improvements were necessary in the following areas:

- a) collection of information;
- b) safety assessment of reported problems;
- c) identification of suitable corrective actions (technical/ operational/ financial/ organizational), both short-term and long-term; and
- d) method of reporting in the reports of ICAO planning and implementation regional groups (PIRGs).

1.2 This methodology is therefore prepared with the assistance of ICAO PIRGs and is approved by the ICAO Council for the efficient identification, assessment and clear reporting of air navigation deficiencies. It may be further updated by the Air Navigation Commission in the light of the experience gained in its utilization.

1.3 For the purpose of this methodology, the definition of deficiency is as follows:

A deficiency is a situation where a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices, and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation.

2. COLLECTION OF INFORMATION

2.1 Regional office sources

2.1.1 As a routine function, the regional offices should maintain a list of specific deficiencies, if any, in their regions. To ensure that this list is as clear and as complete as possible, it is understood that the regional offices take the following steps:

- a) compare the status of implementation of the air navigation facilities and services with the regional air navigation plan documents and identify facilities, services and procedures not implemented;
- b) review mission reports with a view to detecting deficiencies that affect safety, regularity and efficiency of international civil aviation;
- c) make a systematic analysis of the differences with ICAO Standards and Recommended Practices filed by States to determine the reason for their existence and their impact, if any, on safety, regularity and efficiency of international civil aviation;
- d) review aircraft accident and incident reports with a view to detect possible systems or procedures deficiencies;
- e) review inputs, provided to the regional office by the users of air navigation services on the basis of Assembly Resolution A33-14, Appendix M;
- f) assess and prioritise the result of a) to e) according to paragraph 4;
- g) report the outcome to the State(s) concerned for resolution; and
- h) report the result of g) above to the related PIRG for further examination, advice and report to the ICAO Council, as appropriate through PIRG reports.

2.2 States' sources

2.2.1 To collect information from all sources, States should, in addition to complying with the Assembly Resolution A31-10, establish reporting systems in accordance with the requirements in Annex 13, paragraph 7.3. These reporting systems should be non-punitive in order to capture the maximum number of deficiencies.

2.3 Users' sources

2.3.1 Appropriate international organizations, including the International Air Transport Association (IATA) and the International Federation of Air Line Pilots' Associations (IFALPA), are valuable sources of information on deficiencies, especially those that are safety related. In their capacity as users of air navigation facilities they should identify facilities, services and procedures that are not implemented or are unserviceable for prolonged periods or are not fully operational. In this context it should be noted that Assembly Resolution A33-14, Appendix M and several decisions of the Council obligate users of air navigation facilities and services to report any serious problems encountered due to the lack of implementation of air navigation facilities or services required by regional plans. It is emphasized that this procedure, together with the terms of reference of the PIRGs should form a solid basis for the identification, reporting and assisting in the resolution of non-implementation matters.

3. REPORTING OF INFORMATION ON DEFICIENCIES

3.1 In order to enable the ICAO PIRGs to make detailed assessments of deficiencies, States and appropriate international organizations including IATA and IFALPA, are expected to provide the information they have to the ICAO regional office for action as appropriate, including action at PIRG meetings.

3.2 The information should at least include: description of the deficiency, risk assessment, possible solution, time-lines, responsible party, agreed action to be taken and action already taken.

3.3 The agenda of each PIRG meeting should include an item on air navigation deficiencies, including information reported by States, IATA and IFALPA in addition to those identified by the regional office according to paragraph 2.1 above. Review of the deficiencies should be a top priority for each meeting. The PIRGs, in reviewing lists of deficiencies, should make an assessment of the safety impact for subsequent review by the ICAO Air Navigation Commission.

3.4 In line with the above, and keeping in mind the need to eventually make use of this information in the planning and implementation process, it is necessary that once a deficiency has been identified and validated, the following fields of information should be provided in the reports on deficiencies in the air navigation systems. These fields are as follows and are set out in the reporting form attached hereto.

a) Identification of the requirements

As per ICAO procedures, Regional Air Navigation Plans detail inter alia air navigation requirements including facilities, services and procedures required to support international civil aviation operations in a given region. Therefore, deficiencies would relate to a requirement identified in the regional air navigation plan documents. As a first item in the deficiency list, the requirements along with the name of the meeting and the related recommendation number should be included. In addition, the name of the State or States involved and/or the name of the facilities such as name of airport, FIR, ACC, TWR, etc. should be included.

b) Identification of the deficiency

This item identifies the deficiency and would be composed of the following elements:

- i) a brief description of the deficiency;
- ii) date deficiency was first reported;
- iii) appropriate important references (meetings, reports, missions, etc)

c) Identification of the corrective actions

In the identification of the corrective actions, this item would be composed of:

- i) a brief description of the corrective actions to be undertaken;
- ii) identification of the executing body;
- iii) expected completion date of the corrective action¹; and
- iv) when appropriate or available, an indication of the cost involved.

4. ASSESSMENT AND PRIORITIZATION

4.1 A general guideline would be to have three levels of priority organized on the basis of safety, regularity and efficiency assessment as follows:

“U” priority = Urgent requirements having a direct impact on safety and requiring immediate corrective actions.

Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.

“A” priority = Top priority requirements necessary for air navigation safety.

Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.

“B” priority = Intermediate requirements necessary for air navigation regularity and efficiency.

¹ It should be noted that a longer implementation period could be assigned in those cases in which the expansion or development of a facility was aimed at serving less frequent operations or entailed excessive expenditures.

Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.

5. MODEL REPORTING TABLE FOR USE IN THE REPORTS OF PIRGS

5.1 Taking the foregoing into account, the model table at the Appendix is for use by PIRGs for the identification, assessment, and prioritisation etc. of deficiencies. It might be preferred that a different table would be produced for each of the different topics i.e. AGA, ATM, SAR, CNS, AIS/MAP, MET. However, all tables should be uniform.

6. ACTION BY THE REGIONAL OFFICES

6.1 Before each PIRG meeting, the regional office concerned will provide advance documentation concerning the latest status of deficiencies.

6.2 It is noted that the regional offices should document serious cases of deficiencies to the Air Navigation Commission (through ICAO Headquarters) as a matter of priority, rather than waiting to report the matter to the next PIRG meeting, and that the Air Navigation Commission will report to the Council.

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE FIELD IN THE REGION

Identification		Deficiencies			Corrective action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action
Requirement of Part..., paragraph (table).. of the air navigation plan	Terra X Terra Y	Speech circuits not implemented Villa X - Villa Y	12 Dec. 2..X	Coordination meeting between Terra X and Terra Y on 16 July 2..X to finalize arrangements to implementation circuit via satellite	Implementation of direct speech circuit via satellite	Terra X	20 Aug. 2..X	A

* Priority for action to remedy a deficiency is based on the following safety assessments:

“U” priority = Urgent requirements having a direct impact on safety and requiring immediate corrective actions.

Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.

“A” priority = Top priority requirements necessary for air navigation safety.

Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.

“B” priority = Intermediate requirements necessary for air navigation regularity and efficiency.

Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.

Appendix B

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE ATM AREA IN THE SAM NE REGION

Identification		Deficiencies			Corrective action			
Requirements	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action
Use of the Aeronautical phraseology	Brazil	In general, the use of aeronautical phraseology in Spanish and English does not meet the required levels and it is a relevant factor with regard to ATS incidents	Sep/2000	Continuous training and supervision in the use of aeronautical phraseology is required.	Aeronautical phraseology will have to be widely disseminated so it may be studied, learnt and well applied by ATC. Brazil is implementing, through an English phraseology course, a quality improvement programme for aeronautical phraseology of air traffic controllers. Also, ATC simulators practices are being carried out in order to solve this deficiency (ATM/1 Committee, July 2001).	CERNAI Brazil	TBD	U
	French Guyana	In general, the use of aeronautical phraseology in Spanish and English does not meet the required levels and it is a relevant factor with regard to ATS incidents	Sep/2000	Continuous training and supervision in the use of aeronautical phraseology is required.	The national phraseology (English and French) has been reviewed by a working group in France. The result is the publication of a new official phraseology (English and French); this phraseology has been distributed to each ATC who has received complementary training (25 th E/CAR-IWG/May 2001).	CAD French Guyana	TBD	U
	Guyana	In general, the use of aeronautical phraseology in Spanish and English does not meet the required levels and it is a relevant factor with regard to ATS incidents	Sep/2000	Continuous training and supervision in the use of aeronautical phraseology is required	Aeronautical phraseology will have to be widely disseminated so it may be studied, learnt and well applied by ATC.	CAD Guyana	TBD	U
	Suriname	In general, the use of aeronautical phraseology in English does not meet the required levels and it is a relevant factor with regard to ATS incidents	Sep/2000	Continuous training and supervision in the use of aeronautical phraseology is required	Aeronautical phraseology will have to be widely disseminated so it may be studied, learnt and well applied by ATC	CAD Suriname	TBD	U
	Venezuela	In general, the use of aeronautical phraseology in English is under the required levels and it is a relevant factor with regard to ATS incidents	Sep/2000	Continuous training and supervision in the use of aeronautical phraseology is required	Aeronautical phraseology will have to be widely disseminated so it may be studied, learnt and well applied by ATC.	DGTA Venezuela	TBD	U

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE ATM AREA IN THE SAM NE REGION

Identification		Deficiencies			Corrective Action			
Requirements	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action
English proficiency in Air Traffic Services, CAR/SAM/3 Rec. 5/35	Brazil	The proficiency in the English language of some ATC units is below the desired level and could be a contributory factor for the occurrence of incidents and/or aeronautical accidents.	Oct/1995	a) After the effective date of Amendment to Annex 1, which establishes that the English level required for ATC personnel, the States/ Territories/ International Organizations should evaluate the personnel of their ATC units and further provide information regarding the deviation level required in the box "Remarks". b) In order to reach and maintain the English language level required, the States/ Territories / International Organizations shall establish a permanent and continuous training plan of ATC units, which contemplates the follow-up of the improvements of personnel of ATC units and shall implement in the same the ATS quality assurance programme. c) The States / Territories / International Organizations shall demand the personnel who works in ATC units, the English language knowledge to be required by ICAO Annex 1.	Brazil has taken the following measures to fulfil this requirement: 1) publication of a new phraseology chapter in the Brazilian document on Rules of the Air and Air Traffic Services, based on Doc 4444 and on the ICAO Manual on Radiotelephony (Doc 9432) 2) Through an English phraseology course, Brazil is implementing a quality improvement programme for aeronautical phraseology of ATCOs 3) ATC simulators practices are being carried out in order to solve this deficiency (ATM Committee, July 2001).	CERNAI Brazil	2000	U

Identification		Deficiencies			Corrective Action			
Requirements	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action
	French Guyana	The proficiency in the English language of some ATC units is below the desired level and could be a contributory factor for the occurrence of incidents and/or aeronautical accidents.	Oct/1995	a) After the effective date of Amendment to Annex 1, which establishes that the English level required for ATC personnel, the States/Territories/ International Organizations should evaluate the personnel of their ATC units and further provide information regarding the deviation level required in the box "Remarks". b) In order to reach and maintain the English language level required, the States/Territories / International Organizations shall establish a permanent and continuous training plan of ATC units, which contemplates the follow-up of the improvements of personnel of ATC units and shall implement in the same the ATS quality assurance programme. c) The States / Territories / International Organizations shall demand the personnel who works in ATC units, the English language knowledge to be required by ICAO Annex 1.	There is a National programme in place that consists of the following: 1) Define the minimum average English proficiency level; 2) Assess the level of each ATC controller and after; 3) Definition of an English language programme in three areas: a) Phraseology; b) aeronautical English, and c) General English (25 th E/CAR IWG Meeting, May 2001).	CAD French Guyana	2000	U

Identification		Deficiencies			Corrective Action			
Requirements	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action
	Venezuela	There is a general deficiency in the proficiency of English among ATC personnel. This deficiency is a relevant factor in ATS incidents	Oct/1995	a) After the effective date of Amendment to Annex 1, which establishes that the English level required for ATC personnel, the States/ Territories/ International Organizations should evaluate the personnel of their ATC units and further provide information regarding the deviation level required in the box "Remarks". b) In order to reach and maintain the English language level required, the States/ Territories / International Organizations shall establish a permanent and continuous training plan of ATC units, which contemplates the follow-up of the improvements of personnel of ATC units and shall implement in the same the ATS quality assurance programme. c) The States / Territories / International Organizations shall demand the personnel who works in ATC units, the English language knowledge to be required by ICAO Annex 1.	The training programme in English language was implemented from 1996 and continues. Several air traffic controllers have been sent to Miami in order to take radar and English courses. The percentage of personnel trained is of 84%. It is expected to have more courses during 2002 (ATM/1 Committee, July 2001).	DGTA Venezuela	03/02	U

DEFICIENCIES UPON WHICH THE ASB TOOK REMEDIAL ACTION
REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE SAR AREA IN THE SAM NE REGION

Identification		Deficiencies			Corrective action			
Requirements	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action
Search and Rescue Facilities, CAR/SAM73 Rec 6/2	Guyana SRR Georgetown	RCC not implemented. Lack of SAR qualified personnel. Inadequate SAR organization	Oct/1995	Needs to comply with FASID Table SAR 1	A working methodology to prepare an aeronautical SAR Plan, and the possible implementation of an aeronautical RCC were suggested to the Guyana CAD. In order to carry out this task, the administration should use as guidance material, Appendix H, Vol. I of Doc 9731-AN/958. Implementation of an aeronautical RCC is the lack of trained personnel in search and rescue services within the Guyana CAD. In order to solve this deficiency, the administration should enable at least two officials to study SAR courses abroad, who, upon their return, shall draft an aeronautical SAR plan and prepare as much personnel as possible, with SAR knowledge, who could be ATCOs; and finally, implement the RCC according to the State's needs operating on a 24-hour basis. Also, some guidelines to be adopted by the administration, where SAR requirements, functional areas and establishment of posts responsible for the implementation, were suggested (Mission L-0144, July 2001).	Guyana CAD	TBD	U

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE ATM AREA IN THE CAR - E REGION

Identification		Deficiencies			Corrective action			
Requirements	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action
Curaçao ACC air/ground communications in order to give Area Control Services	Netherlands Antilles Curaçao FIR	IATA Reports indicated difficulties to communicate in VHF with the Curaçao ACC during RNAV trials in the CAR/SAM Regions	May/2001	Second Meeting/Workshop of ATM Authorities and Planners Lima, May 2001	To supply an improved coverage of the air-ground communications of the Curaçao ACC; i.e. HF equipment, in the Northwest part of the Curaçao FIR, according to Annex 11	DCA Netherlands Antilles	TBD	U
Use of aeronautical phraseology	Netherlands Antilles	In general, the use of aeronautical phraseology in English does not meet the required levels and it is a relevant factor with regard to ATS incidents	Sept/2000	ATS/SG/9 Meeting	Continuous training and supervision in the use of aeronautical phraseology is required.	DCA Netherlands Antilles	2003	U

DEFICIENCIES UPON WHICH THE ASB TOOK REMEDIAL ACTION

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE SAR AREA IN THE E-CAR REGION

Identification		Deficiencies			Corrective action			
Requirements	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of completion	Priority for action
Search and Rescue Facilities CAR/SAM/3 Rec. 6/2	Trinidad and Tabago	SRR partially implemented	Oct/1995	GREPECAS/5	Needs to comply with FASID Table SAR 1.	CAD Trinidad and Tobago	2003	U

