FINAL REPORT

INTERNATIONAL CIVIL AVIATION ORGANIZATION

REPORT OF THE FIFTEENTH MEETING OF THE CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS/15)

(Rio de Janeiro, Brazil, 13 – 17 October 2008)

Prepared by the Secretariat and the Chairman of GREPECAS

October 2008

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TABLE OF CONTENTS

i Table of Contents i-1
ii History of the Meeting ii-1
Place and Duration of the Meeting....ii-1
Opening Ceremony and Other Matters ii-1
Organization, Officers and Secretariat ii-1
Working Languages ii-2
Agenda ii-2
Attendance....ii-3
Conclusions and Decisions....ii-3
List of Conclusions ii-4
List of Decisions ii-7
iii List of Participants iii-1
iv List of Documentation....iv-1

REPORT ON AGENDA ITEM 1

1. Follow-up on the outcome of the GREPECAS/14 Meeting....1-1

1.1 Review of the ANC/UIC actions on the GREPECAS/14 Report 1-1
1.2 Review of the status of implementation of GREPECAS/14 Conclusions and Decisions....1-1
1.3 Review of the status of implementation of GREPECAS outstanding Conclusions....1-1

REPORT ON AGENDA ITEM 2

2. Global and inter-regional activities 2-1

2.1 Inter-regional and intra-regional CNS/ATM activities and coordination
2.2 Implementation of SMS in CAR/SAM States

REPORT ON AGENDA ITEM 3

3. Regional air navigation planning and implementation issues 3-1

3.1 Report on the Institutional Aspects
3.2 Report of the AVSEC/COMM/6 Meeting
3.3 Report of the AERMET/SG/9 Meeting
3.4 Report of the AGA/AOP/SG/6 Meeting
3.5 Report of the AIM/SG/11 Meeting
3.6 Report of the ATM/CNS/SG/6 Meeting
3.6 Report of the ATM/CNS/SG/6 Meeting – ATM Committee
3.6 Report of the ATM/CNS/SG/6 Meeting – CNS Committee

REPORT ON AGENDA ITEM 4

4. Regional air navigation deficiencies.....4-1

4.1 Reports of the ASB/8 and ASB/9 Meetings
4.2 Specific air navigation planning and implementation deficiencies in the CAR/SAM Regions

REPORT ON AGENDA ITEM 5

5. Management of the GREPECAS Mechanism.....5-1

5.1 Report of the ACG/7 Meeting
5.2 Review of GREPECAS and its Contributory Bodies Terms of Reference and Work Programmes

REPORT ON AGENDA ITEM 6

6. Other business.....6-1

HISTORY OF THE MEETING

ii.1 Place and Duration of the Meeting

Upon the kind invitation of the Brazilian Department of Airspace Control (DECEA), the Fifteenth Meeting of the CAR/SAM Planning and Implementation Group (GREPECAS/15) was held in Rio de Janeiro, Brazil, from 13 to 17 October 2008, at the Sheraton Rio Hotel & Resort.

ii.2 Opening Ceremony and Other Matters

Mr. José Miguel Ceppi, Regional Director of the ICAO South American Office, expressed his sincere appreciation to the authorities of Brazil for hosting the Meeting.

Tt. General Ramón Borges Cardoso, General Director DECEA, welcomed the delegates, wished them success with the meeting objectives, and emphasized the need for close inter-regional coordination aimed at providing a more harmonised air navigation system. Mrs. Solange Paiva Vieira, President of ANAC, also attended the opening ceremony.

ii.3 Organization, Officers and Secretariat

Mr. Normando Araújo de Medeiros (Brazil), Chairman of GREPECAS, presided over the Meeting.

Mr. José Miguel Ceppi, ICAO Regional Director, South American Office, acted as Secretary of the Meeting and was assisted by the following officers the ICAO NACC and SAM Regional Offices and ICAO Montreal:

Loretta Martin	Regional Director, ICAO NACC Office
Carlos Stehli	Secretary of the ATM/CNS Subgroup Secretary of the Institutional Aspects Task Force
Hindupur Sudarshan	Regional Programme Officer, ANB
Víctor Hernández	Secretary of the ATM Committee
Nohora Arias	Secretary of the AERMET Subgroup
Ricardo Delgado	Secretary of the AVSEC Committee
Raúl Martínez	Secretary of the AIM Subgroup
Jaime Calderón	Secretary of the AGA/AOP Subgroup

ii.4 **Working Languages**

The working languages of the meeting and its documentation were English and Spanish.

ii.5 **Agenda**

The agenda was adopted as follows:

REPORT ON AGENDA ITEM 1

Follow-up on the outcome of the GREPECAS/14 Meeting

1.1 Review of the ANC/UIC actions on the GREPECAS/14 Report
1.2 Review of the status of implementation of GREPECAS/14 Conclusions and Decisions
1.3 Review of the status of implementation of GREPECAS outstanding Conclusions

REPORT ON AGENDA ITEM 2

Global and inter-regional activities

2.1 Inter-regional and intra-regional CNS/ATM activities and coordination
2.2 Implementation of SMS in CAR/SAM States

REPORT ON AGENDA ITEM 3

Regional air navigation planning and implementation issues

3.1 Report on the Institutional Aspects
3.2 Report of the AVSEC/COMM/6 Meeting
3.3 Report of the AERMET/SG/9 Meeting
3.4 Report of the AGA/AOP/SG/6 Meeting
3.5 Report of the AIM/SG/11 Meeting
3.6 Report of the ATM/CNS/SG/6 Meeting
3.6 Report of the ATM/CNS/SG/6 Meeting – ATM Committee
3.6 Report of the ATM/CNS/SG/6 Meeting – CNS Committee

REPORT ON AGENDA ITEM 4

Regional air navigation deficiencies

4.1 Report of the ASB/8 and ASB/9 Meetings
4.2 Specific air navigation planning and implementation deficiencies in the CAR/SAM Regions

REPORT ON AGENDA ITEM 5

Management of the GREPECAS Mechanism

5.1 Report of the ACG/7 Meeting

5.2 Review of GREPECAS and its Contributory Bodies Terms of Reference and Work Programmes

REPORT ON AGENDA ITEM 6

Other business

ii.6 **Attendance**

The GREPECAS Meeting was attended by 130 participants from States/Territories Members of GREPECAS, as well as one State located outside the Regions, and 7 observers from International Organizations. A list of participants is shown in pages iii-1 to iii-3.

ii.7 **Conclusions and Decisions**

GREPECAS records its action in the form of conclusions and decisions as follows:

Conclusions deal with matters which in accordance with the Group's terms of reference, directly merit the attention of States or on which further action will be initiated by ICAO in accordance with established procedures.

Decisions deal with matters of concern only the GREPECAS and its contributory bodies.

ii.8 **List of Conclusions**

Conc. No.	Title of Conclusion	Page
15/1	DEVELOPMENT OF PERFORMANCE BASED REGIONAL AND NATIONAL PLANS	2-2
15/2	EXTENSION OF APPLICABILITY DATES OF E-TOD PROVISIONS	2-6
15/4	D-VOLMET AERONAUTICAL DATA LINK REQUIREMENTS IN THE CAR/SAM REGIONS	3-4
15/5	TRAINING FOR CAR/SAM STATES ON THE DETAILS AND USE OF NEW WAFS ICING, TURBULENCE AND CONVECTIVE CLOUD FORECASTS DERIVED FROM GRIB 2 DATA	3-4
15/6	UPDATE ON THE PROGRESS MADE IN ISCS BROADCAST IMPROVEMENTS BY THE WASHINGTON WAFC PROVIDER STATE	3-5
15/7	DATA MANAGEMENT REPORTS	3-5
15/8	UPDATE TO WAFC WORKSTATIONS TO INTRODUCE CHANGES TO OPMET DATA	3-6

Conc. No.	Title of Conclusion	Page
15/9	IMPLEMENTATION PLAN FOR THE TRANSITION FROM GRIB 1 TO GRIB 2 CODE FORM	3-6
15/10	LETTERS OF AGREEMENT BETWEEN CIVIL AVIATION AND METEOROLOGICAL AUTHORITIES AND THE VULCANOLOGICAL AGENCY	3-7
15/11	IMPLEMENTATION OF THE VOLCANO OBSERVATORY NOTICE FOR AVIATION (VONA) FORMAT	3-7
15/12	BACK-UP MWOs IN THE CAR/SAM STATES	3-8
15/13	INCREASE OF THE FREQUENCY OF PERIODIC SIGMET WV TESTS	3-8
15/14	SEMINAR/WORKSHOP ON SIGMET INFORMATION	3-8
15/15	TRANSITION TO THE NEW TAF FORMAT	3-9
15/17	PROPOSAL OF AMENDMENT TO THE CAR/SAM ANP FASID, PART VI – MET	3-10
15/19	AERODROME CERTIFICATION TRAINING	3-11
15/20	NEW TEXT WITHIN PARAGRAPH 3.5, VOLUME 1, ANNEX 14, FOR RUNWAY END SAFETY AREAS (RESAS)	3-12
15/21	SEMINAR ON AIRPORT DEMAND/CAPACITY FOR THE CAR/SAM REGIONS	3-13
15/23	LOCATION OF OBSTACLES	3-14
15/24	IDENTIFICATION OF MARKING PAIRS TO BE ELIMINATED	3-14
15/25	COMPATIBILITY OF ENGLISH AND SPANISH WORDING IN ANNEX 14, VOL. I, PAR. 5.2.5.4	3-15
15/26	TRAINING SEMINARS/WORKSHOPS IN SUPPORT OF THE TRANSITION FROM AIS/MAP TO AIM	3-15
15/27	ADOPTION OF THE DRAFT STRATEGY FOR THE TRANSITION TO AIM	3-16
15/28	PRIORITY IN THE APPLICATION OF MEASURES FOR THE MIGRATION FROM AIS/MAP TO AIM SERVICES	3-16
15/29	DATE OF AIRAC SYSTEM	3-16
15/30	APPLICATION GUIDANCE OF THE HUMAN FACTORS PRINCIPLES IN AIS/MAP	3-17
15/31	RESTRICTED ACCESS IN AREAS WHERE AERONAUTICAL INFORMATION/DATA IS MANAGED IN WEB SERVERS AND NOTAM AND GIS DATA BASES	3-18
15/32	FOLLOW-UP TO THE DEVELOPMENT OF MODELS FOR THE EXCHANGE OF INFORMATION/AERONAUTICAL DATA FOR AIM	3-19
15/33	ACTIONS BY STATES FOR THE INTRODUCTION OF THE e-AIP DIRECTED TO AIXM	3-19
15/35	IMPLEMENTATION OF THE NEW ICAO FLIGHT PLAN MODEL	3-23
15/36	MEASURES TO REDUCE OPERATIONAL ERRORS IN THE ATC COORDINATION LOOP BETWEEN ADJACENT ACCs	3-24
15/37	REVIEW OF THE METHODOLOGY USED FOR SAFETY ASSESSMENT	3-24
15/38	NATIONAL PBN IMPLEMENTATION PLANS	3-26

Conc. No.	Title of Conclusion	Page
15/39	ADOPTION OF STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)	3-27
15/40	SEMINAR/WORKSHOP ON THE IMPLEMENTATION OF AIR-GROUND DATA LINKS AND THEIR APPLICATIONS	3-30
15/41	AMENDMENT TO THE REGIONAL AIR NAVIGATION PLAN – TABLE CNS/3 OF FASID	3-31
15/42	AVAILABILITY OF GNSS RECEIVER FOR PROJECT RLA/03/902 IONOSPHERIC ANALYSES AND STUDIES	3-31
15/43	SUPPORT FOR PROJECT RLA/03/902-SACCSA	3-32
15/44	USE OF GNSS IN THE SHORT-TERM	3-32
15/45	REVIEW OF THE PLAN FOR THE PHASE OUT OF NDB STATIONS	3-33
15/46	CAR/SAM REGIONAL ACTION FOR THE PREPARATION AND SUPPORT OF THE ICAO POSITION FOR WRC-11	3-34
15/47	FURTHER ACTIONS TO IMPLEMENT CONCLUSION ASB/8/2	4-2
15/48	REFINEMENT OF PROCEDURES FOR CLASSIFYING AND ADDRESSING DEFICIENCIES	4-4

ii.9 List of Decisions

Dec No.	Title of Decision	Page
15/3	DISSOLUTION OF THE INSTITUTIONAL ASPECTS TASK FORCE	3-2
15/16	HARMONIZATION OF THE INFORMATION CONTAINED IN CAR/SAM FASID TABLE AOP 1 AND IN DOC 7910	3-10
15/18	IDENTIFICATION AND APPLICATION OF MECHANISMS FOR THE TRANSLATION OF MET TRAINING MATERIAL AND GUIDES	3-10
15/22	SURVEY ON AERONAUTICAL STUDIES IN THE AGA FIELD	3-13
15/34	NEW CNS/ATM SUBGROUP	3-21
15/49	ASPECTS TO BE CONSIDERED IN DEVELOPING THE WORK PROGRAMMES OF GREPECAS CONTRIBUTORY BODIES	5-1
15/50	DISBANDING OF THE HUMAN RESOURCES AND TRAINING SUBGROUP (HRT/SG)	5-2
15/51	REVISED GREPECAS PROCEDURAL HANDBOOK	5-2
15/52	TERMS OF REFERENCE, WORK PROGRAMME, AND COMPOSITION OF GREPECAS CONTRIBUTORY BODIES	5-3
15/53	NEW FORMAT FOR GREPECAS CONRIBUTORY BODIES WORK PROGRAMME	5-4
15/54	TENTATIVE PROGRAMME OF MEETINGS FOR 2009	5-4

LIST OF PARTICIPANTS

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Rafael Torres Aguirreche	Eduardo Gallardo Jamani Ramírez Domingo del Rosario Daniel Caro	VENEZUELA

Members	Advisers	Nominated by
Also attending the Meeting:		
	Luis Andrada Márquez	SPAIN
Observers		**Representing**
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Alex Figuereo		IFATCA
	Akhil Sharma Adriana Mattos	SITA

LIST OF WORKING PAPERS

Number	Agenda Item	Title	Prepared and Presented by
WP/01	--	Tentative Agenda, Schedule and Proposed Working Methods	Secretariat
WP/02	1.1	Review of the ANC/UIC actions on the GREPECAS/14 Report	Secretariat
WP/03	1.2	Review of the status of implementation of GREPECAS/14 Conclusions and Decisions ***(Revised)***	Secretariat
WP/04	1.3	Review of the status of implementation of GREPECAS outstanding Conclusions ***(Revised)***	Secretariat
WP/05	2.1	Inter-regional and intra-regional CNS/ATM activities and coordination ***(Revised)***	Secretariat
WP/06	2.2	Implementation of SMS in CAR/SAM States	Secretariat
WP/07	3.1	Report of the Fourth Meeting of the Task Force on Institutional Aspects	Secretariat
WP/08	3.2	Report of the AVSEC/COMM/6 Meeting	Secretariat
WP/09	3.3	Report of the AERMET/SG/9 Meeting ***(Revised)***	Secretariat
WP/10	3.4	Report of the AGA/AOP/SG/6 Meeting	Secretariat
WP/11	3.5	Report of the AIM/SG/11 Meeting ***(Revised)***	Secretariat
WP/12	3.6	Report of the ATM/CNS/SG/6 Meeting	Secretariat
WP/13	3.6	Report of the ATM/CNS/SG/6 Meeting – ATM Committee	Secretariat
WP/14	3.6	Report of the ATM/CNS/SG/6 Meeting – CNS Committee	Secretariat
WP/15	4.1	Reports of the ASB/8 and ASB/9 Meetings	Secretariat
WP/16	4.2	Specific air navigation planning and implementation deficiencies/problems in the CAR/SAM Regions	Secretariat
WP/17	5.1	Report of the ACG/7 Meeting	Secretariat
WP/18	5.2	Review of GREPECAS and its Contributory Bodies Terms of Reference and Work Programmes	Secretariat

Number	Agenda Item	Title	Prepared and Presented by
WP/19	5.2	Increasing the effectiveness of planning and Implementation Regional Groups (PIRGs)	Secretariat
WP/20	6	Airspace, Airports, and "Green" Procedures, a commitment of the DGCA of Chile	Chile
WP/21	2.1	Review of the results of GBAS Implementation Studies and Trials in Chile	Chile
WP/22	6	Human Factors in the Provision of Air Traffic Services in Chile	Chile
WP/23	2.2	SMS Implementation en Chile	Chile
WP/24	6	Managing the Environmental Issues of Air Transport	IATA
WP/25	6	Flexibility with Special Use Airspace	IATA
WP/26	6	Current Industry Crisis – Fuel	IATA
WP/27	2.1	Next Generation Air Transportation System ***(Revised)***	U.S.A.
WP/28	2.1	Proposed Updates to flight operating procedures for hurricane hunter aircraft (TEAL & NOAA) ***(Revised)***	U.S.A.
WP/29	2.1	Satellite Data Communications Performance in Oceanic and Remote Regions and the work of the Future Air Navigation System Satcom Improvement Team (FANS SIT) ***(Revised)***	U.S.A.
WP/30	6	The Importance of Complying With the Aeronautical Information Regulation and Control (AIRAC) Schedule	IATA / Jeppesen
WP/31	2.1	Global Transition from AIS to AIM	Secretariat
WP/32	2.1	PBN Implementation	Secretariat
WP/33	2.1	SBAS Implementation ***(Revised)***	Brazil
WP/34	2.1	National ATM Operational Concept	Brazil
WP/35	2.1	Automated systems interconnection in the CAR/SAM Regions	Brazil
WP/36	5.2	Review of GREPECAS and its Contributory Bodies Terms of Reference and Work Programmes	Secretariat
WP/37	2.1	Regional and National Approach to Implementation of a Global ATM System ***(Revised)***	Secretariat

Number	Agenda Item	Title	Prepared and Presented by
WP/38	2.1	Implementation of new ICAO Flight Plan	Secretariat
WP/39	2.2	Operational Safety Management System (SMS) Implementation in Paraguay ATS services ***(Revised)***	Paraguay
WP/42	5.2	Future of the AVSEC in the hemispherical context	Colombia
WP/43	5.2	Efficiency and safety enhancement	Colombia
WP/44	6	Support to MANPADS assessment programme	Colombia
WP/45	2.1	Considerations regarding the decision making in the implantation of the CAR/SAM Regions augmentations ***(Revised)***	Spain
WP/46	2.1	ATFM Implementation in Colombia	Colombia
WP/47	3.2	Implementation of the shared secure network	Colombia
WP/48	2.1	Multiple flight plans and implementation of new ICAO flight plan	Colombia
WP/49	2.1	Alteration of deadlines for the generation of electronic terrain and obstacle data	Brazil
WP/50	1.3	Experience of Cuba and COCESNA in the activation of the NOTAM contingency plan	Cuba and COCESNA

LIST OF INFORMATION PAPERS

Number	Agenda Item	Title	Prepared and Presented by
IP/01	--	General Information ***(Revised)***	Secretariat
IP/02	--	List of Working and Information Papers ***(Revised)***	Secretariat
IP/03	2	Report on Progress toward Data link Harmonization ***(English only)***	Secretariat

Number	Agenda Item	Title	Prepared and Presented by
IP/04	2	Overview of Global Air Navigation Plan (GANP) and Global Aviation Safety Plan (GASP) ***(English only)***	Secretariat
IP/05	6	IOSA – The IATA Operational Safety Audit Programme ***(English only)***	IATA
IP/06	6	IATA Safety Audit for Ground Operations ***(English only)***	IATA
NI/07	4.2	Implantación Eficaz del Sistema AIRAC ***(Spanish only)***	Chile
NI/08	4.2	Inclusión de la Tabla AIS-4 del FASID CAR/SAM y la actualización de las Tablas AIS 1, 2, 3, 5, 6, 7 y 8 del FASID AIS ***(Spanish only)***	Chile
IP/09	3.6	Follow-up to the proposal for amendment to Doc 4444 – PANS/ATM on aeronautical phraseology in Spanish	Secretaría
NI/10	6	Cualquier otro asunto ***(Spanish only)***	Brazil
IP/11	6	Establishment of the Regional Aviation Safety Group – Pan American (RASG – PA)	Secretariat
IP/12	2.1	Implementation of performance-based navigation (PBN) in the CAR/SAM Regions – Procedure design training ***(English only) (Revised)***	United States
IP/13	2.1	West Atlantic Route System Plus (WATRS Plus) Route Structure Redesign and Separation Reduction Project Post-Implementation Review ***(English only)***	United States
IP/14	6	Federal Aviation Administration (FAA) Data Communication Program Status ***(English only)***	United States
IP/15	6	FAA navigation evolution roadmap ***(English only)***	United States
IP/16	6	Other matters. Considering the environmental effects from civil aviation ***(English only)***	Secretariat
NI/17	6	Conclusiones Seminario Taller Regional GNSS 2008 ***(Spanish only)***	Colombia
NI/18	3.6	Intercambio de datos radar con ACC adyacentes al ACC Habana ***(Spanish only)***	Cuba
NI/19	6	Legislación aeronáutica básica y regulaciones complementarias ***(Spanish only)***	Cuba

Agenda Item 1 Follow-up on the outcome of the GREPECAS/14 Meeting

1.1 Review of the ANC/UIC actions on the GREPECAS/14 Report

1.1.1 The Meeting was presented with actions taken by the Air Navigation Commission (ANC) and the Committee on Unlawful Interference (UIC) during their review and approval of the Report of the Fourteenth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS) held in San Jose, Costa Rica, from 16 to 20 April 2007. The Meeting noted the specific actions taken by the ANC, the UIC and the follow-up by the States and Secretariat on conclusions and decisions of the Meeting as contained in **Appendix A** to this part of the Report.

1.1.2 In relation to Conclusion 14/21, which called on ICAO to review the plan for the migration of operational meteorological (OPMET) messages from alphanumeric codes to binary universal form for representation of meteorological data (BUFR) codes, the Meeting noted that the Secretariat had suspended related work pending results of the World Meteorological Organization (WMO) Expert Team study on the use of Extensible Markup Language (XML).

1.1.3 The Meeting noted that the Commission had endorsed Conclusion 14/30 regarding the differences between levels of protection for rescue and fire fighting services and that the subject was already covered under the Aerodrome Panel's work programme concerning rescue and fire fighting.

1.1.4 Recognizing the difficulties being experienced by some States in the CAR/SAM Regions with aiming point markings stripe widths that overlap with the runway side stripe markings when the runway width is less than 30 m wide, the Meeting noted that the Commission had supported the initiative of GREPECAS in Conclusion 14/35. The Meeting was apprised that the Secretariat has already taken up this issue, which was being addressed under the Aerodrome Panel's work programme concerning visual aids for navigation.

1.1.5 Referring to Conclusion 14/45 regarding Large Height Deviations (LHD), the Meeting noted the Commission's concern with the poor coordination between area control centres, which generates the majority of errors in LHDs, and that the ANC complimented GREPECAS for providing necessary training to its States on this subject. Consequent to the Third Special RMA Meeting held in Montreal from 13 to 15 May 2008, which explored better ways to define and consider LHDs in risk analysis, the Meeting was informed that ICAO will introduce explanatory text in the revised RMA Manual due to be released in February 2009.

1.1.6 Recognizing that the approach of GREPECAS in Conclusion 14/50 is consistent with Strategic Objective E: Continuity - *Maintain the continuity of aviation operations*, the Meeting noted that the Commission congratulated GREPECAS on the development of a model regional catalogue of air traffic services (ATS) contingency plans and encouraged the States/Territories of CAR and SAM Regions to provide their information for incorporation into this new catalogue.

1.1.7 The Meeting noted that UIC concurred with GREPECAS Conclusion 14/9, which called on ICAO to develop a Security Training Package (STP) for MRTDs before 2010, and that the Secretariat is in the process of developing such a STP with a target date by the end of 2009.

1.1.8 The Meeting was informed that the UIC appreciated the efforts of GREPECAS for developing an action plan for the negotiation, parts acquisition, maintenance and training in AVSEC screening equipment including HBS issues. Noting that this material would also eventually assist other regions, the UIC agreed with GREPECAS (Conclusion 14/10 refers) to include the material in the new edition of the Security Manual for Safeguarding Civil Aviation against Acts of Unlawful Interference (Doc 8973).

1.1.9 The Meeting noted that, as there were no specific items in the report of GREPECAS/14 that called for Council action, said report was not submitted to the Council.

1.1.10 The Meeting thanked the ANC and UIC for their valuable guidance on various activities of the GREPECAS and that it would be taken into account in the development of the ongoing work programme of the region.

1.2 Review of the status of implementation of GREPECAS/14 Conclusions and Decisions

1.3 Review of the status of implementation of GREPECAS outstanding Conclusions

1.2.1 Upon reviewing the status of implementation of the Action Plan developed by GREPECAS/14, and considering that the conclusions that were outstanding up until GREPECAS/13 were in the same format for follow-up purposes, the Meeting agreed that as of the following meeting, these two topics could be presented under one agenda item in a single appendix. To that end, it agreed to amend the GREPECAS Procedural Handbook to include the decisions adopted by GREPECAS/14 regarding this follow-up.

1.2.2 The Meeting also agreed to include in this Meeting's report, the review of the GREPECAS/14 Action Plan and the conclusions pending implementation up to GREPECAS/13.

1.2.3 In keeping with the existing methods, and taking into account that stated in the preceding paragraphs, the Meeting analyzed the status of implementation of GREPECAS conclusions based on the uniform classification. In this respect, it noted that as a result of the action taken up to GREPECAS/14, the following conclusions had been completed or superseded:

Table 1 - Completed Conclusions and Decisions
C 10/32, C 12/9, C 12/10, C 12/32, C 12/37, C 12/45, C 12/72, C 12/77, C 12/81, C 12/100, C 13/40, C 13/61, C 13/68, C 13/71, C 13/72, C 13/75, 13/78, C 13/84, C 13/89, C 14/4, C 14/7, C 14/8, C 14/10, C 14/13, C 14/14, C 14/16, C 14/17, C 14/18, C14/19, C 14/22, C 14/23, C 14/24, C 14/25, C14/26, C 14/29, C 14/31, C 14/33, C 14/41, D 14/42, C 14/43, C 14/44, C 14/45, C 14/46, C 14/47, C 14/48, C 14/49, C 14/50, C 14/52, C 1453, D 14/55, D 14/57 a), D 14/58, C 14/59, D 14/60, D 14/62, D 14/63, C 14/64.

1.2.4 The Meeting also agreed that the following conclusions were still pending implementation:

Table 2 - Outstanding Conclusions and Decisions
C 12/67, C 12/129, C 13/2, C 13/4, C 13/5, C 13/7, C 13/8, C 13/9, C 13/10, C 13/11, C 13/15, C 13/16, C 13/23, C 13/28, C 13/30, C 13/32, C 13/33, C 13/36, C 13/41, C 13/45, C 13/51, C 13/53, C 13/66, C 13/74, C 13/79, C 13/85, C 13/87, C 13/92 y C 13/95, D 14/1, C 14/2, C 14/3, C 14/5, C 14/6, C 14/9, C 14/11, C 14/12, C 14/15, C 14/20, C 14/21, C 14/27, C 14/28, C 14/30, C 14/32, C 14/34, C 14/35, C 14/36, C 14/37, C 14/38, C 14/39, C 14/40, C 14/51, D 14/54, C 14/56, D 14/57 b), C 14/61.

APPENDIX A

GREPECAS/14 MEETING CONCLUSIONS/DECISIONS — ACTION TAKEN BY THE AIR NAVIGATION COMMISSION

Conc/Dec and Strategic Objective(s)	Title of Conclusion/ Decision	Text of Conclusion/Decision	Proposed Follow-up	Responsibility	Deliverable	Action by ANC	Reporting/ Completion Date
C 14/5 **A, D**	**GENERIC DOCUMENT CONCERNING AN AGREEMENT FOR THE ESTABLISHMENT OF A REGIONAL MULTINATIONAL ORGANIZATION**	Whereas the most effective way to implement/consolidate multinational facilities, and manage and provide services is through the implementation of a Regional Multinational Organization (RMO), and that this requires a basic reference document to serve as basis for the States/Territories concerned to conduct the necessary studies: a) it is recommended that the States/Territories that are interested in implementing an RMO use the summarized Draft Agreement for the Establishment of a Regional Multinational Organization (RMO) shown in the attached Appendix A, the Draft Agreement for the Establishment, Operation, and Management of an RMO, shown in Appendix B, and the corresponding draft by-laws shown in Appendix C to this part of the Report; and b) the ICAO NACC and SAM Regional Offices are requested to follow-up on action taken by the States with respect to the implementation of an RMO, as appropriate.	Determine States interested in implementing an RMO	ICAO NACC and SAM Regional Office	ICAO State letter	Noted and encouraged the initiative.	Dec. 2008

Conc/Dec and Strategic Objective(s)	Title of Conclusion/ Decision	Text of Conclusion/Decision	Proposed Follow-up	Responsibility	Deliverable	Action by ANC	Reporting/ Completion Date
C 14/21 **E**	**REVIEW OF THE TRANSITION TO THE BUFR CODE**	That ICAO, in order to reduce the possible adverse impact of the transition from the traditional alphanumeric codes to BUFR-coded OPMET messages on the aeronautical community, invite WMO to review, as a matter of urgency, its plans to use BUFR-coded OPMET information.	No action required until the results of the work by the WMO Expert Team on the use of XML are known	ICAO HQ		The Commission (AN Min. 176-4) had already reviewed this aspect and the Secretariat had suspended its related work pending results of the study by WMO Expert Team on the use of XML.	Dec. 2008
C 14/27 **E**	**ATS/AIS/MET/PILOT COORDINATION SEMINAR**	That ICAO, in coordination with WMO, organise an ATS/AIS/MET/Pilot Coordination Seminar for the CAR/SAM Regions.	Organize the seminar	ICAO HQ	A coordination seminar	Noted.	Dec. 2008
C 14/28 **E**	**SPECIAL IMPLEMENTATION PROJECT (SIP) FOR THE CAR REGION**	That ICAO consider the need of establishing a MET Special Implementation Project for the CAR Region, in order to study and recommend measures for various CAR States/Territories with the purpose of solving specifically the problems affecting MET services. *Note: In order to join efforts for proposing solutions to aeronautical meteorology deficiencies, consideration could be given to the possibility of implementing the SIP in coordination with WMO.*	Establishment of SIP	ICAO HQ	MET SIP for the CAR Region	Noted and requested the Secretariat to review the proposal in accordance with established practice.	Completed

Conc/Dec and Strategic Objective(s)	Title of Conclusion/ Decision	Text of Conclusion/Decision	Proposed Follow-up	Responsibility	Deliverable	Action by ANC	Reporting/ Completion Date
C 14/30 **A**	**PROPOSAL TO IDENTIFY POSSIBLE DIFFERENCES BETWEEN THE LEVEL OF PROTECTION FOR RESCUE AND FIRE FIGHTING SERVICES (TABLE AOP-1)**	That, a) ICAO study the possibility to modify and incorporate data for Column 3 in the ICAO Air Navigation Plan, Doc 8733, Volume II – FASID, Part III – AOP by including new text that the aircraft type, with its respective model, be used to determine the RFF CAT to be included as an additional data entry. That is, Column 3 will consider two data entries (RFF category and aircraft type/model), not one; and, b) States/Territories review current data in Column 3 in the rescue and fire fighting category, taking into account the type and model of the aircraft.	Modify and incorporate data for Column 3 in the ICAO Air Navigation Plan, Doc 8733, Volume II –FASID Review current data in Column 3	ICAO HQ States/Territories	Adjusted Table AOP-1 Corrected information on Column 3 of Table AOP-1	Noted that the subject is already covered under the Aerodrome panel's work programme concerning rescue and fire fighting.	Dec 2008 Dec. 2008
C 14/32 **A**	**SEMINAR/WORKSHOP ON AERONAUTICAL STUDIES FOR RESAs, RUNWAY STRIPS AND OBSTACLES**	That ICAO: a) encourage CAR/SAM States/Territories to attend the Seminar/Workshop on Aeronautical Studies being planned by the ICAO NACC Regional Office, to serve as a forum to discuss aeronautical studies in the AGA area, mainly regarding RESAs, runway strips and obstacles. b) study the possibility that the first two days of the Seminar/Workshop consider specific problems regarding RESAs and runway strips where specifically permitted by Annex 14.	State/Territory Letters	NACC Office Workshop coordination	Training of airport professionals on aeronautical studies	Noted.	Dec. 2008

Conc/Dec and Strategic Objective(s)	Title of Conclusion/ Decision	Text of Conclusion/Decision	Proposed Follow-up	Responsibility	Deliverable	Action by ANC	Reporting/ Completion Date
C 14/34 **A**	**DOWN SLOPE OF THE RUNWAY STRIP LOCATED BEYOND THE LEVELED PORTION**	That ICAO study the indication of the maximum up and down slope to the segment located beyond the portion leveled in the runway strip, measured in the sense of runway distancing, contained in Annex 14, Volume I, Chapter 3.	Consider revision to standard	ICAO HQ	Revised standard	Noted that the subject is already covered under the Aerodrome panel's work programme concerning airport design.	2009
C 14/35 **A**	**AIMING POINT MARKING STRIPE WIDTHS FOR RUNWAYS LESS THAN 30m WIDE**	That ICAO study the standard regarding aiming point marking stripe widths that overlap with the runway lateral stripe when less than 30 m wide.	Consider revision to standard	ICAO HQ	Revised standard	Noted that the subject is already covered under the Aerodrome panel's work programme concerning visual aids for navigation.	2009
C 14/37 **A, D**	**CONSOLIDATION OF THE CAR/SAM DIGITAL VFR AERONAUTICAL CHARTS PROJECT**	That ICAO NACC and SAM Regional Offices work in a coordinated manner to achieve the CAR/SAM Digital VFR Aeronautical Charts Project by the end of 2008: a) with PAIGH, in order to foster the production of VFR digital aeronautical charts on a common standards and procedures basis; and b) through the establishment of a technical co-operation programme funding mechanism by ICAO.	Achieve the CAR/SAM Digital VFR Aeronautical Charts	ICAO NACC and SAM Regional Offices	CAR/SAM Digital VFR Aeronautical Charts Project	Noted.	Dec. 2008

Conc/Dec and Strategic Objective(s)	Title of Conclusion/ Decision	Text of Conclusion/Decision	Proposed Follow-up	Responsibility	Deliverable	Action by ANC	Reporting/ Completion Date
C 14/39 **A, D**	**ACTIONS FOR THE USE OF GEOGRAPHIC INFORMATION SYSTEMS (GIS) IN THE CAR/SAM REGIONS AIM SERVICES**	That, taking into account the appropriateness of evolving towards the concept of digital aeronautical information management by electronic means in the CAR/SAM Regions, and that the use of Geographic Information Systems (GIS) could contribute directly and positively with these requirements, by end of 2008: a) CAR/SAM States and Territories consider the implementation of Geographical Information Systems (GIS) in AIM services as automated support for the electronic display of AIP and aeronautical chart information, and take action to permit training of AIS personnel on the practical management of GIS, in order to facilitate the implementation and operation of these systems in their AIS services; and b) the NACC and SAM Regional Offices take the necessary action to consider within relevant regional technical co-operation regional projects, the implementation requirements of Geographic Information Systems (GIS) as automated support for the activities of AIM services in the CAR/SAM Regions, in direct support of CNS/ATM.	Implementation of GIS	States of CAR/SAM Regions	GIS	Noted.	Dec. 2008

Conc/Dec and Strategic Objective(s)	Title of Conclusion/ Decision	Text of Conclusion/Decision	Proposed Follow-up	Responsibility	Deliverable	Action by ANC	Reporting/ Completion Date
C 14/44 **D**	**ESTABLISHMENT OF AN ACTION PLAN FOR THE INTERFACE OF ATM AUTOMATED SYSTEMS**	That CAR/SAM States/Territories/Intl Organizations, formulate an action plan to interface ATM automated systems, which includes:				Noted.	
		a) the assignment of an expert as point of contact to carry out regional coordination work for the interface of ATM automated systems;	Designate points of contact	States/ Territories/ intl orgs	Action Plan for the interface of ATM automated systems		Dec. 2008
		b) the analysis of the current service level provided by ATS automated systems, as well as requirements to satisfy future operational applications of the ATM community using the Table of ATS Operational Requirements for Automated Systems, included in Appendix 4B to this part of the Report; and	The analysis of the current service level	States/ Territories/ intl orgs			
		c) document the action plan and share best practices and experiences with other States/Territories/Intl Organizations, as required.	Develop action plan	States/ Territories/ intl orgs			

Conc/Dec and Strategic Objective(s)	Title of Conclusion/ Decision	Text of Conclusion/Decision	Proposed Follow-up	Responsibility	Deliverable	Action by ANC	Reporting/ Completion Date
C 14/45 **D**	**TRAINING ON THE ANALYSIS OF LARGE HEIGHT DEVIATIONS (LHD)**	That, taking into account the need to have qualified experts available to assist in the activities of the GTE, the CAR and SAM States/Territories/Intl Organizations: a) support training on analysis of Large Height Deviations as part of regional activities; b) send technical experts to the training sessions envisaging those experts becoming regular participants of the GTE; and c) that ICAO take the necessary actions to coordinate GTE training sessions in each Region.	Support training Send technical experts to training sessions Coordinate training sessions	States/ Territories/ intl orgs States/ Territories/ intl orgs ICAO NACC and SAM Regional Offices	Experts trained Training sessions State letter	a) Noted. b) Noted. c) Called upon the Secretariat to extend the offer of similar training seminars to all the remaining Regions.	Nov. 2008 Nov. 2008 2009
C 14/46 **D**	**CAR/SAM ROADMAP FOR PBN**	That States/Territories and Intl Organizations adopt and apply the CAR/SAM Roadmap for PBN as shown in Appendix XX to this part of the report.	Apply the Road Map for PBN	States/Territories / intl orgs	Harmonized implementation of PBN	Noted.	Short term 2010 Medium term 2011/2015
C 14/47 **D**	**SAFETY ASSESSMENT SEMINARS AND METHODOLOGY**	That ICAO: a) promote seminars related to safety assessments, aiming at the preparation of personnel to work in the future PBN implementation; b) encourage safety airspace and separation panel (SASP) to develop a common methodology for safety assessment in terminal areas.	Coordinate safety assessment activities Develop a common methodology for safety assessment in TMA	ICAO NACC and /SAM Regional Offices ICAO HQ	Safety assessment seminars Common methodology for safety evaluations in TMA	a) Noted. b) Called upon the Secretariat to undertake this task through SASP.	Dec 2008 2010

Conc/Dec and Strategic Objective(s)	Title of Conclusion/ Decision	Text of Conclusion/Decision	Proposed Follow-up	Responsibility	Deliverable	Action by ANC	Reporting/ Completion Date
C 14/49 **C, D**	**ADOPTION OF THE CAR AND SAM ATFM CONCEPT OF OPERATIONS (ATFM CAR/SAM CONOPS)**	That the CAR and SAM States/Territories and Intl Organizations: a) adopt the CAR and SAM ATFM Concept of Operations (ATFM CONOPS) shown in Appendix X to this part of the report; and b) establish a work program to enable the implementation of the ATFM CONOPS.	To adopt CAR/SAM ATFM CONOPS To establish a work programme for ATFM implementation	States/ Territories/ intl orgs States/ Territories/ intl orgs	CAR/SAM CONOPS	Noted.	Dec. 2008
C 14/50 **D, E**	**CATALOGUE OF CAR/SAM ATS CONTINGENCY PLANS**	That: a) the model Catalogue of CAR/SAM ATS contingency plans, shown in Appendix Y to this part of the report, is adopted; and b) CAR/SAM States/Territories/International Organization send the updated information to ICAO, before 1st July 2007, for its inclusion in said document.	Adoption of Model Catalogue To send information to NACC and SAM Regional Offices	GREPECAS States/ Territories/ intl orgs	Model adopted ATS contingency plan Catalogue completed	Noted, and appreciated the efforts of GREPECAS.	Adopted by GREPECAS in April 2007 Dec. 2008

Conc/Dec and Strategic Objective(s)	Title of Conclusion/ Decision	Text of Conclusion/Decision	Proposed Follow-up	Responsibility	Deliverable	Action by ANC	Reporting/ Completion Date
C 14/51 **D**	**RE-ORGANIZATION OF THE WORK PROGRAMMES TO SUPPORT THE ATM PERFORMANCE OBJECTIVES FOR THE CAR AND SAM REGIONS**	That, to support the evolution from a system-based towards a performance-based approach for the planning and implementation of air navigation infrastructure: a) CAR/SAM States, Territories and International Organizations take the necessary actions to develop and implement national ATM work programmes in accordance with the performance objectives; and b) ICAO continue the coordination to re-organize the CAR/SAM ATM Work Programmes in accordance with the new Global Plan Initiatives (GPI) and to support ICAO Strategic Objectives.	Develop and implement an ATM work programme oriented to performance objectives Reorganize the ATM programme according with the GPIs and ICAO Strategic Objectives	States/ Territories/ intl orgs ICAO NACC and SAM Regional Offices	Harmonized ATM performance objectives implemented ATM work programme aligned with performance objectives and ICAO Strategic Objectives	Noted and requested the Secretariat to continue providing requisite guidance to the Regions for the formulation regional performance objectives.	Dec. 2009 Oct. 2008
C 14/52 **D**	**REVIEW FOR THE ADOPTION OF THE MEMORANDUM OF UNDERSTANDING AND IMPLEMENTATION OF THE ACTION PLAN FOR THE MEVA II / REDDIG INTERCONNECTION**	That in order to implement the interconnection of the VSAT MEVA II and the organization of the REDDIG networks, the Member States/Territories/International Organizations of these networks: a) study and review the feasibility to adopt the Memorandum of Understanding (MoU); and b) approve and implement the tasks related to the Action Plan presented in Appendix B to this part of the report.	Review and adopt the MoU Implement the Action Plan	States and intl orgs States and intl orgs	Signed MoU Implementation of interconnection	Noted.	March 2008 March 2008

Conc/Dec and Strategic Objective(s)	Title of Conclusion/ Decision	Text of Conclusion/Decision	Proposed Follow-up	Responsibility	Deliverable	Action by ANC	Reporting/ Completion Date
D 14/55 **D**	**APV I CAPABILITY AS A MINIMUM PERFORMANCE REQUIREMENT FOR THE CAR/SAM REGIONAL SBAS IMPLEMENTATION**	That in order to coordinate the initiatives and projects for the SBAS solutions proposed for the CAR/SAM Regions, the CNS Committee must keep in mind that they be capable of achieving at least APV I capability.	Development of SBAS solution	CNS Committee of GREPECAS	SBAS solution	Noted.	Aug. 2008
C 14/56 **D**	**PROGRESSIVE DEACTIVATION OF NDB STATIONS**	That in order to develop progressive deactivation of NDB Stations without affecting safety, States, Territories, International Organizations and airspace users: a) analyse the service provided by each NDB station, its function, procedural existence with other aids such as VOR/DME, GNSS-RNAV, as well as the aircraft capacity/development that operate in serviced airspace; b) based on the analysis described in item a) above and in the Table format included in the Appendix AF to this part of the Report, develop a plan for the progressive deactivation of NDB stations; and c) inform the corresponding ICAO NACC or SAM Regional Office regarding their respective plan for the progressive deactivation of NDB stations before 30 November 2007.	Analyse the service provided by each NDB station and develop a plan for the progressive deactivation of NDB stations	States and intl orgs	A plan for progressive deactivation of NDB stations	Noted.	July 2008

Conc/Dec and Strategic Objective(s)	Title of Conclusion/ Decision	Text of Conclusion/Decision	Proposed Follow-up	Responsibility	Deliverable	Action by ANC	Reporting/ Completion Date
D 14/57	**DEVELOPMENT OF A REGIONAL PLAN FOR THE PROGRESSIVE DEACTIVATION OF NDB STATIONS**	That the CNS Committee: a) prepare a regional plan for the progressive deactivation of NDB stations, taking into account the responses received from States, Territories, International Organizations and airspace users, Conclusion 14/X and the Table presented in the Appendix AF to this part of the Report; and b) based on the results of item a) above, propose the corresponding amendments to Table CNS 3 of the FASID.	Prepare a regional plan for the progressive deactivation of NDB stations Proposed amendment	CNS Committee of GREPECAS	NDB stations regional deactivation plan Proposal of amendment	Noted.	Aug. 2008 Dec. 2008
C 14/59 **A**	**NATIONAL COORDINATOR RESPONSIBLE FOR UPDATING THE GREPECAS AIR NAVIGATION DEFICIENCY DATABASE**	That, a) the States/Territories designate a National Coordinator responsible for updating the GREPECAS Air Navigation Deficiency Database (GANDD); b) the name, e-mail address, phone and fax numbers, etc., of the National Coordinator be forwarded to the ICAO Regional Offices no later than 31 May 2007; and c) the Regional Offices foster a workshop to train identified National Coordinators, so that they can fully master all aspects concerning the GANDD.	Provide the information to Regional Offices Develop the workshop	States ICAO NACC and SAM Regional Offices	National Coordinator Database Workshop on GANDD	Noted.	March 2008 March 2008

***Note:** ICAO has established the following Strategic Objectives for the period 2005-2010:

A: *Enhance* **Safety** *global civil aviation safety*;

B: Security - *Enhance global civil aviation security*

C: Environmental Protection - *Minimize the adverse effect of global civil aviation on the environment*

D: Efficiency - *Enhance the efficiency of aviation operations*

E: Continuity - *Maintain the continuity of aviation operations*

F: Rule of Law - Strengthen law governing international civil aviation.

Agenda Item 2 Global and inter-regional activities

2.1 Inter-regional and intra-regional CNS/ATM activities and coordination

Regional and National Performance Framework

2.1.1 The Meeting noted that the ICAO planning objective aims to achieve a performance-based global air traffic management (ATM) system through the implementation of air navigation systems and procedures in a progressive, cost-effective and cooperative manner.

2.1.2 The performance-based approach adheres to the following principles: strong focus on results through adoption of performance objectives and targets; collaborative decision-making driven by the results; and reliance on facts and data for decision-making. Assessment of achievements is periodically checked through a performance review, which in turn requires adequate performance measurement and data collection capabilities.

2.1.3 The advantages of a performance-based approach includes: orientation towards results, transparency and accountability; shifts from prescribing solutions to specifying desired performance; employs quantitative and qualitative methods; avoids a technology driven approach; helps decision-makers set priorities; makes the most appropriate trade-offs; and allows optimum resource allocation.

2.1.4 To facilitate the realization of a performance-based Global ATM system, the Meeting was informed that ICAO has made significant progress in the development of relevant guidance material. The documents include: a) *Global Air Traffic Management Operational Concept (Doc 9854)*; b) *Air Traffic Management System Requirements (Doc 9882); Manual on Global Performance of the Air Navigation System (Doc 9883);* and d) *Global Air Navigation Plan* (*Doc 9750)*. All of these documents are available on ICAO-NET.

2.1.5 In terms of regional performance planning, the work will be based on the Global Air Navigation Plan in conjunction with Global Performance Manual. The outcome of this process would result in an output and management form that has been designated as “Performance Framework Form (PFF).” This PFF has been standardized, and a sample is shown in **Appendix A** to this part of the Report.

2.1.6 The PFF is applicable to both regional and national planning framework and thus ensures easy understanding and harmonization. The explanatory notes provided in **Appendix B** to this part of the Report serve as a guide for completing the PFF. The Meeting agreed that GREPECAS, on the basis of PFF, will identify the individual parties responsible for achieving the regional performance objectives and establish a monitoring mechanism. The Regional Plan will include information on progress achieved and provide periodic reports to ICAO Headquarters.

2.1.7 In terms of national performance planning, the States in cooperation with the ATM community, should update or develop national plans aligned with the regionally agreed performance objectives through use of the common PFF template described in Appendix A to this part of the Report. The Meeting agreed that States, through the PFF, should identify the individual parties

responsible for achieving the national performance objectives and as a means for monitoring progress. National plans should include information on progress achieved and provide periodic reports to ICAO.

2.1.8 The Meeting acknowledged that the global ATM system will emerge through the implementation of many initiatives by States over several years on an evolutionary basis. The set of global planning initiatives (GPIs) contained in the Global Plan are meant to facilitate and harmonize the work already underway within the regions and States so as to bring needed benefits to aircraft operators over the near and medium terms. For the long term, ICAO will continue to develop newer initiatives on the basis of the Operational Concept and subsequently these will be placed in the Global Plan.

2.1.9 Considering the need to have a clearly defined strategy to implement ATM systems as well as to align work programmes of the States, regions and ICAO Headquarters, the Meeting adopted the following conclusion:

CONCLUSION 15/1 DEVELOPMENT OF PERFORMANCE BASED REGIONAL AND NATIONAL PLANS

That,

a) GREPECAS develop a performance-based regional plan in accordance with the Global Air Navigation Plan and the Global ATM Operational Concept. This plan should include identification of regional performance objectives and completion of performance framework forms for all air navigation areas such as ATM, CNS, AIM, MET and AGA/AOP; and

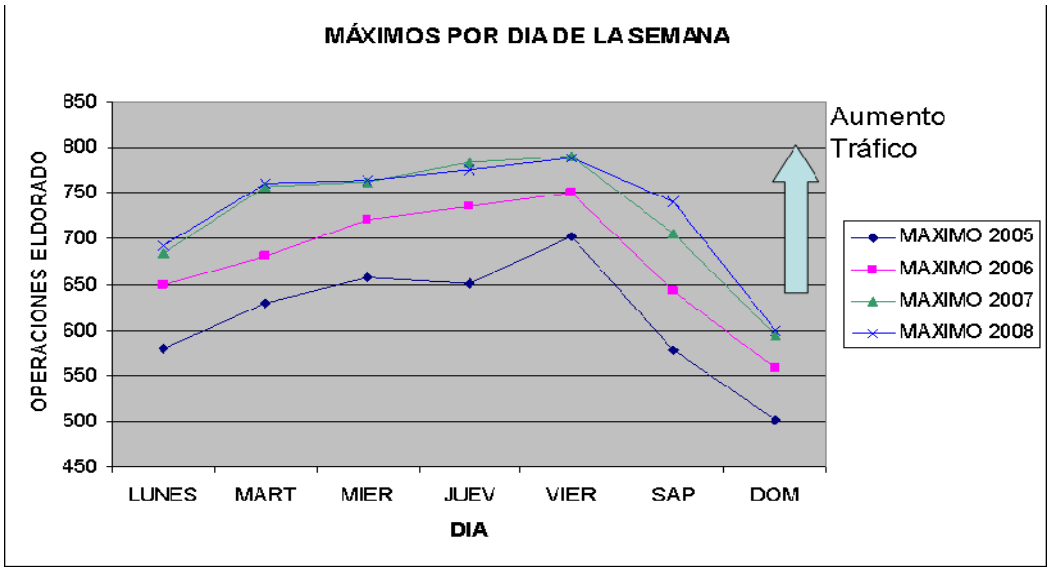
b) States, Territories and International Organizations, taking into account user needs, develop performance-based national plans in accordance with the regional performance objectives included in the Regional Air Navigation Plan. These national plans should encompass identification of national performance objectives and completion of performance framework forms for all air navigation areas such as ATM, CNS, AIM, MET and AGA/AOP.

2.1.10 The Meeting was provided with an update on the Next Generation Air Transport System (NextGen) developed by U.S. NextGen will enable safe, efficient and reliable movement of large numbers of people and goods throughout the air transportation system. The system is founded upon a set of principles and is enabled by a series of key capabilities including network-enabled information access; performance-based services; layered adaptive security; weather assimilated into decision-making; broad-area precision navigation; aircraft trajectory-based operations; equivalent visual operations; and super-density operations. Real-time information access will provide users with all required information for decision-making. NextGen will use four dimensional trajectories as the basis for planning and executing system operations. NextGen will deliver an overall system capacity up to three times greater than that of current operating levels. Detailed information regarding NextGen is provided at http://www.jpdo.gov.

2.1.11 Taking into account the need to develop a strategic planning document with the objective of gradual and coordinated introduction of the National ATM Operational Concept, the Meeting noted that the Airspace Control Department (DECEA) of Brazil has developed the National ATM Operational Concept. Initially, the concept will make use of available procedures, processes and capacities evolving into the medium-term encompassing emerging procedures, processes and capacities. The implementation is expected to take place in three phases: Phase 1 – short-term up to 2010; Phase 2 - medium-term: 2011 to 2015; and Phase 3 - long-term: 2016 to 2020.

2.1.12 Colombia presented information on the development and implementation of its flow management unit - CFMU, so as to meet the rapid growth of air traffic operations in Colombia.

2.1.13 The measures adopted by the flow management unit of Colombia include a collaborative decision-making process, optimization of flow into El Dorado Airport to avoid additional holding of aircraft, and continuous sequencing in the approach phase. All of these measures respond to the increase of aircraft operations to this aerodrome, which is shown below by day of the week:



2.1.14 The Meeting noted that Colombia had signed a cooperation agreement with the FAA, defining the terms and conditions for use of the ETMS system, the exchange of non-critical radar data and information on domestic and oceanic flights. Colombia informed that it had decided to support regional ATFM implementation initiatives and offered to host the next ATFM/TF meeting.

2.1.15 The Meeting noted that Colombia, Mexico, United States and Brazil would continue working to increase capacity and establish operational relationships with adjacent FIRs.

2.1.16 Information was presented on successful flight plan and secondary radar exchange tests between the Amazonico and Maiquetia ACCs, and the aeronautical administrations of Brazil and Venezuela were expected to sign a bilateral agreement shortly to implement this functionality using the REDDIG. It was also noted that similar tests were being planned between Brazil and Peru. Information was also provided on automation developments under Regional Project RLA/98/003.

2.1.17 The Meeting took note of the agreements to interface the automated systems among Cuba, Jamaica and COCESNA, as well as the radar data exchange and sharing agreements established by COCESNA with Mexico, Panama, United States and Central American States. The Meeting was also informed that Trinidad and Tobago was engaged in exchange of radar data with French Antilles (Martinique and Guadeloupe) and also with Barbados, and that this activity was expected to be completed by December 31, 2008. Also, Trinidad and Tobago took note of the exchange of radar data between Brazil and Venezuela, and since it also has a REDDIG node, is interested in holding discussions with Venezuela that would lead to the exchange of radar data.

Amendments to ICAO Flight Plan

2.1.18 The Meeting noted that on 28 May 2008, amendment No. 1 to the Fifteenth Edition of the *Procedures for Air Navigation Services - Air Traffic Management* (PANS-ATM, Doc 4444) was approved, calling for substantial changes to the ICAO flight plan to take effect from 15 November 2012. The interim edition of the amendment is available as an attachment to the electronic version of State letter AN 13/2.1-08/50 on the ICAO-NET (www.icao.int/icaonet).

2.1.19 The new ICAO flight plan (FLP) format and related provisions are necessary to allow ATM systems to make optimum use of advanced aircraft capabilities as well as to meet the evolving requirements of automated ATM systems. The new flight plan addresses air navigation functionalities and technologies such as RVSM, PBN, RCP, ADS-C, ADS-B and GNSS while maintaining a high degree of commonality with the existing flight plan format. It should be noted that the amendment to the flight plan is an interim step towards a completely revamped system of interaction between aircraft and the ATM system, wherein the aircraft will be an integral part of the ATM system as envisaged in the Global ATM Operational Concept.

2.1.20 During discussions on this topic, the Meeting raised the concern that States could begin to implement the new FPL format as early as 2009. Implementation of FPLs in a non-integrated fashion could result in flight plans being rejected or processed improperly by States that have not yet transitioned. The changes will have widespread implications on automated systems, including ATM systems and airspace user systems.

2.1.21 In view of the many implications affecting a wide range of automated flight plan processing systems and the associated operating practices, the transition process needs to be carefully planned taking into account compatibility with existing systems, human factors, training, etc. Any incompatibility with the processing capability in a few States could have significant impact on operations in other states of the region. This has the potential to create a significant and global degradation of ATM services.

2.1.22 The Meeting was of the view that a full and comprehensive assessment of the implications of the transition to the new FPL for ANSPs and airspace users is absolutely necessary. In this regard, the Meeting considered that ICAO global leadership is critical in addressing the issues to ensure a smooth transition.

2.1.23 In order to assist States with an orderly transition from the current flight plan to the new one, a basic checklist using the performance framework form (PFF) has been developed by ICAO HQ and is available in **Appendix C** to this part of the Report. Additional guidance on transition to the new flight plan is being developed by ICAO HQ and is scheduled for availability to States by February 2009.

2.1.24 The Meeting agreed that there would be many actions necessary to ensure a streamlined regional implementation, including the development of a regional transition strategy and procedures for its implementation. In order to ensure that the matter would be appropriately addressed on a regional basis, the Meeting agreed to refer the matter to the Flight Plan Task Force of the GREPECAS ATM/CNS/SG already established for this purpose.

2.1.25 Colombia informed about the duplication of flight plans occurring within its airspace that affect Flight Data Processor (FDP) operation and that have resulted in several incidents during coordination with adjacent FIRs. The Meeting recalled that the responsibility for providing adequate flight plans rests with the operators, who usually have more than one office that distributes FPL information to the FIRs. For this reason, the Meeting considered that each affected State should resolve the problem individually.

Transition to Aeronautical Information Management (AIM)

2.1.26 The Meeting noted that to satisfy new requirements arising from the ATM Operational Concept, AIS must transition to the broader concept of AIM with a different method of information provision and management given its data centric nature, as opposed to the product centric nature of AIS.

2.1.27 To support this transition from AIS to AIM, the Meeting noted that ICAO has put in place a work programme **(Appendix D** to this part of the Report**),** which includes development of a global strategy/road map; appropriate provisions in Annex 4 and Annex 15 and associated guidance material for standard aeronautical information/data conceptual and exchange models (AIXM) to enable the global exchange of data in digital open-architecture formats; establishment of new digital requirements with an appropriate quality and presentation of aeronautical information/data to the end user such as e-AIP, electronic charts, electronic terrain and obstacles data (e-TOD); and the use of Geographic Information System (GIS) as a main tool. Furthermore, it will be necessary to define the human resource activities to meet future AIM functions. This will involve identification of the basic skill set required for future personnel (personnel profiles), mechanisms for validating competency, and the development of supporting guidance and training material. A work plan will also be developed to consider the resolution of any legal and institutional issues.

2.1.28 In view of the complexity of the issues involved in the transition from AIS to AIM, ICAO has established a new ANC study group named the Aeronautical Information Services-Aeronautical Information Management Study Group (AIS-AIM/SG) to assist the ICAO Secretariat with the development of a global strategy/roadmap for the transition from AIS to AIM and to prepare new AIM SARPs and guidance material. Consequently, the existing Aeronautical Information and Charts Study Group (AIS/MAP/SG) and the Aeronautical Data Modelling Study Group (ADM/SG) of ICAO have been disbanded. Ongoing activities at the regional level will be integrated with those of the study group to ensure harmonization at the global level. The Meeting noted that MET issues, including the review of existing provisions in Annex 3 — *Meteorological Service for International Air Navigation* and a review of Doc 7192 - *Training Manual*, will be included in the work of the study group as the transition from AIS to AIM develops.

2.1.29 Noting the information on transition to AIM, the Meeting recognized the need for States to establish a work programme for transition from AIS to AIM in 2009, once ICAO completes the development of the global strategy/roadmap.

2.1.30 Regarding the requirements in Annex 15 Chap. 10, Appendix 8, related to Electronic Terrain and Obstacle Data *(e-TOD*) and Doc 9881 - *Guidelines for Electronic Terrain, Obstacle and Aerodrome Mapping Information*, the Meeting expressed concern that the States might not meet the applicability dates for the availability of terrain and obstacle data of Area 1 and terrain data of Area 4 by 18 November 2008, and terrain and obstacle data of Areas 2 and 3 by 18 November 2010. The Meeting observed that difficulties arose due to inadequate resources, the SARPs are not accompanied by explanatory notes, and guidance material is available only in English. The Meeting took note that States have to carry out immense work to collect terrain and obstacle data for Area 1, even considering the use of satellite technology. With reference to collection of obstacle data for Area 2 and 3, the Meeting agreed that as there are many airports in the CAR/SAM Regions that operate IFR, the task is time consuming and represents a big challenge.

2.1.31 Concluding the discussions on the subject, the Meeting agreed to call on ICAO to consider extending the time limit for this provision concerning e-TOD and formulated the following conclusion:

CONCLUSION 15/2 EXTENSION OF APPLICABILITY DATES OF E-TOD PROVISIONS

That ICAO consider extending the applicability dates for developing e-TOD requirements as follows: a) Areas 1 and 4 to 2010; and b) Areas 2 and 3 to 2013.

Global/Inter/Intra-Regional Activities

2.1.32 Information was provided to the Meeting in relation to global/inter-regional and intra-regional activities. In this regard, the Meeting noted the activities of ICAO being carried out to develop the electronic Air Navigation Plan (eANP). It was noted that this planning tool, which would be available on-line, had two objectives:

a) at the global level - reconcile the Regional Air Navigation Plan with the ATM Operational Concept, the new Global ANP provisions and the ICAO planning processes of new activities; and

b) at the regional level - expedite regional planning and coordination through simplifying and freeing core planning from a long and cumbersome formal approval process (whilst maintaining the planning and coordination process requirements within the ICAO regional machinery).

2.1.33 The Meeting was also informed of the deliverables to be produced, the methodology to be used to obtain these deliverables, as well as the tools for communication planning and the five-letter named code (5LNC) management tool. It was noted that the eANP could be available to the States during 2009 and advances can be seen on the ICAO GIS website (https://192.206.28.84/eganp).

2.1.34 Information on several recent international events was provided, as well as activities being carried out under some Regional Technical Cooperation Projects such as the RLA/06/901. It was noted that, as part of the latest important events, RVSM had been implemented on 25 September 2008, in the AORRA airspace.

2.1.35 The Meeting was informed on the perspective of the satellite data communications service provision and data link performance problems that have impacted service. A summary of the positive effect of the work of the future air navigation system SATCOM improvement team (FANS SIT) over the last year was also presented. Due to the future increase of satellite communications for CPDLC and ADS-C, this issue was considered of importance and it was agreed to send Working Paper 29 to the CNS/ATM Subgroup for further study.

GNSS Matters

2.1.36 The Meeting was presented with information concerning plans by Brazil for GNSS augmentation. In this regard, it took note of the considerations expressed by Brazil that had led to the conclusion of abandoning its SBAS project, and to the decision not to implement this GNSS augmentation due to cost/benefit reasons. Brazil requested the Meeting to consider its decision and consider the impact on CAR/SAM Regional SBAS implementation initiatives. Likewise, Chile informed on its plans to implement GBAS augmentation, and provided an implementation schedule. It was noted that these plans contemplated an agreement with FAA for the conduct of studies, the purchase of GBAS equipment, and installation at Arturo Merino Benitez International Airport.

2.1.37 Cuba informed its participation in Project RLA/03/901 since its beginning, recognizing the importance of the objectives of same. Notwithstanding, Cuba emphasized the need to know the intention of CAR/SAM States in developing SBAS for these regions and, consequently, to integrate Project RLA/03/902 with the purpose to reduce Phase III costs. Cuba also indicated that without this action it will be very difficult to continue investigation and development work.

2.1.38 The matter of information concerning ABAS, SBAS and GBAS augmentations was discussed in a detailed report under Agenda Item 3 (paragraph 3.6.51).

Flight Operating Procedures for Hurricane Hunter Aircraft (TEAL & NOAA)

2.1.39 The Meeting took note of the information contained in the material entitled "Hurricane Hunters – Flight Operations" for aircraft operations with call signs TEAL and NOAA conducted under instrument flight rules (IFR). **Appendix E** to this part of the report contains an outline of storm operations and the support requested by *"Teal"* or *"NOAA"* aircraft. Work on procedure coordination is being carried out by the ICAO NACC Office.

2.1.40 It was noted that these operations were closely coordinated with the Federal Aviation Administration (FAA), the National Oceanographic and Atmospheric Administration (NOAA), and the United States Air Force. The Meeting endorsed the operations carried out by the Hurricane Hunters in the Caribbean, the Gulf of Mexico, the Central and Eastern Pacific, and the Western Atlantic hoping to improve coordination mainly with North American, Central American and Caribbean States.

2.2 Implementation of SMS in CAR/SAM States

2.2.1 Under this agenda item, the Meeting was presented with information on ICAO activities concerning State Safety Programmes (SSP) and Safety Management Systems (SMS), and on the proposal for amendment on this topic. Information was also provided on the progress made in the CAR/SAM Regions with respect to Key Activity A8 of the ICAO Strategic Objectives, the progress made by States with respect to the SMS training programme, and on the results obtained from SMS activities.

2.2.2 In this respect, it was noted that in order to comply with the aforementioned Key Activity A8, ICAO Headquarters and the Regional Offices had carried out a series of activities aimed at providing the States/Territories and International Organisations with specific SMS courses, using as a reference the ICAO Safety Management Manual and the official ICAO SMS Course.

2.2.3 The Meeting recalled that the Air Navigation Commission, at the fourth meeting of its 176 Session held on 25 October 2007, had conducted a preliminary review of a proposal for amendment to Annexes 1, 6, Parts I and III, 8, 13, and 14 with a view to harmonizing and broadening safety management provisions. Comments were made on the reference framework proposed for the implementation and maintenance of a SSP and for the implementation and maintenance of a service provider SMS.

2.2.4 The Secretariat informed the Meeting that by late 2007, training had been provided to a total of 1046 experts and 22 regional instructors to conduct SMS courses on behalf of ICAO. Courses were conducted in Cuba (October 2006), El Salvador (June 2007), United States (January 2007), Guatemala (February 2007), Mexico (February, April, and September 2007), Costa Rica (August and September 2007), Dominican Republic (November 2007), Honduras (2007), Nicaragua (November

2007), Netherlands Antilles (December 2007) and Aruba (December 2007). Likewise, COCESNA has supported the application of SMS in the disciplines where requested and in all Central American States.

2.2.5 Likewise, the Secretariat reported that it had continued with the regional SMS training programme, and courses had been conducted in Argentina (March and June 2007), Bolivia (August 2007), Brazil (September 2006), Chile (March and July 2007), Colombia (February and September 2007, August 2008, and one planned for December 2008), Ecuador (September 2007, and August 2008), Panama (August 2006, and April 2007), Paraguay (August 2007), Peru (March 2007), Uruguay (December 2006) and Suriname/Guyana (March 2008).

2.2.6 The Meeting noted that as a result of the first workshops, and following extensive debates, the States had expressed their views regarding the requirements for developing SSPs, approving and monitoring the implementation of the key components of an SMS, and possible alternatives to overcome potential obstacles with the implementation of both SSP and SMS key elements. This information could be used as input for future ICAO State assistance activities regarding appropriate implementation of SSP and SMS. Likewise, it was deemed suitable to create a *SMS Point-of-Contact Address Book.*

2.2.7 The Chilean delegation informed the Meeting on how the Civil Aviation Authority (DGAC) of this State has initiated SMS procedures, establishing general guidelines at institutional level and initial requirements for the development of the National Safety Management System at a provider and operator level of the aeronautical system. It is expected to implement the specific actions in order to achieve SMS implementation in the different areas of the Directorate according to the compliance phases in the period 2007 – 2013 (i.e. WP/23, Summary, par. 3.5).

2.2.8 Paraguay also informed that they are working on the planning and implementation of SMS for air traffic services, as well as establishing measures for airport services operators and aircraft. Joint work and analysis was conducted with the normative sector and operational air traffic services to establish an acceptable security level. This phase was completed in February 2008. The final phase to complete the implementation of SMS for air traffic services in Paraguay is foreseen for April 2009 (i.e. WP/39, Summary, pars, 2.16 and 2.17),

2.2.9 The Meeting recognized that the SMS programmes are a feedback source that could be shared among focal points in charge of SMS implementation in the States, Territories and International Organizations of the CAR/SAM Regions.

APPENDIX A

PERFORMANCE FRAMEWORK FORM

(a sample)

<table>
<tr><td colspan="5">REGIONAL PERFORMANCE OBJECTIVES /NATIONAL PERFORMANCE OBJECTIVES —
OPTIMIZE THE ATS ROUTE
STRUCTURE IN EN-ROUTE AIRSPACE</td></tr>
<tr><td colspan="5">Benefits</td></tr>
<tr><td>Environment
Efficiency</td><td colspan="4">• reductions in fuel consumption;
• ability of aircraft to conduct flight more closely to preferred trajectories;
• increase in airspace capacity;
• facilitate utilization of advanced technologies (e.g., FMS based arrivals) and ATC decision support tools (e.g., metering and sequencing), thereby increasing efficiency.</td></tr>
<tr><td colspan="5">Strategy
Short term (2010)
Medium term (2011 - 20015)</td></tr>
<tr><td>ATM OC COMPONENTS</td><td>TASKS</td><td>TIMEFRAME START-END</td><td>RESPONSIBILITY</td><td>STATUS</td></tr>
<tr><td rowspan="8">AOM</td><td>En-route airspace</td><td rowspan="8">2005-2008</td><td></td><td></td></tr>
<tr><td>• analyze the en-route ATS route structure and implement all identifiable improvements;</td><td></td><td></td></tr>
<tr><td>• implement all remaining regional requirements (e.g. RNP 10 routes); and</td><td></td><td></td></tr>
<tr><td>• finalize implementation of WGS-84</td><td></td><td></td></tr>
<tr><td>• monitor implementation progress</td><td></td><td></td></tr>
<tr><td>• develop a strategy and work programme to design and implement a trunk route network, connecting major city pairs in the upper airspace and for transit to/from aerodromes, on the basis of PBN and, in particular, RNAV/5, taking into account interregional harmonization;</td><td></td><td></td></tr>
<tr><td>• monitor implementation progress</td><td></td><td></td></tr>
<tr><td>linkage to GPIs</td><td colspan="4">GPI/5: performance-based navigation, GPI/7: dynamic and flexible ATS route management, GPI/8: collaborative airspace design and management, GPI/11: RNP and RNAV SIDs and STARs and GPI/12: FMS-based arrival procedures.</td></tr>
</table>

APPENDIX B

PERFORMANCE FRAMEWORK FORM - EXPLANATORY NOTES

1. **Performance framework form:** This form is an output and management form which is applicable to both regional and national planning and includes references to the Global Plan. Other formats may be appropriate but should contain as a minimum the elements described below

2. **Performance objective:** Regional /national performance objectives should be developed using a performance based approach that best reflects the necessary activities needed to support regional/national ATM systems. During their life cycle, performance objectives may change depending on the ATM system's evolution; therefore, throughout the implementation process, these should be coordinated with and be available to all interested parties within the ATM Community. The establishment of collaborative decision making processes ensures that all stakeholders are involved in and concur with the requirements, tasks and timelines.

3. **Regional performance objective:** Regional performance objectives are the improvements required to the air navigation system in support of the global performance objectives, and are related to the operating environments and priorities applicable at the regional level.

4**.** **National performance objective:** National performance objectives are the improvements required to the air navigation system in support of the regional performance objectives, and are related to the operating environments and priorities applicable at the State level.

5**.** **Benefits:** The regional/national performance objectives should meet the expectations of the ATM community as described in the operational concept and should lead to benefits for stakeholders and be achieved through operational and technical activities aligned with each performance objective.

6. **Strategy:** ATM evolution requires a clearly defined progressive strategy including tasks and activities which best represent the national and regional planning processes in accordance with the global planning framework. The goal is to achieve a harmonized implementation process evolving toward a seamless global ATM system. For this reason, it is necessary to develop short (1 to 5 years) and medium term (6 to 10 years) work programmes, focusing on improvements to the system indicating a clear work commitment for the parties involved.

7. **ATM operational concept components;** Each strategy or set of tasks should be linked with associated components of the ATM operational concept. The designators for ATM components are as follows:

- AOM – Airspace organization and management
- DCB – Demand and capacity management
- AO – Aerodrome operations
- TS – Traffic synchronization
- CM – Conflict management
- AUO – Airspace user operations
- ATM SDM – ATM service delivery management

8. **Tasks:** The regional/ national work programmes, using these PFF templates, should define tasks in order to achieve the said performance objective and at the same time maintain a direct relation with ATM system components. The following principles should be considered when developing work programme:

- The work should be organized using project management techniques and performance-based objectives in alignment with the strategic objectives of ICAO.

- All tasks involved in meeting the performance objectives should be developed using strategies, concepts, action plans and roadmaps which can be shared among parties with the fundamental objective of achieving seamlessness through interoperability and harmonization.

- The planning of tasks should include optimizing human resources as well as encouraging dynamic use of electronic communication between parties such as the Internet, videoconferences, teleconferences, e-mail, telephone and facsimile. Additionally, resources should be efficiently used, avoiding any duplication or unnecessary work.

- The work process and methods should ensure that performance objectives can be measured against timelines and the national and regional progress achieved can be easily reported to PIRGs and ICAO Headquarters respectively.

9. **Timeframe:** Indicates start and end time period of that particular task(s).

10. **Responsibility:** Indicates the organization/entity/person accountable for the execution or management of the related tasks.

11**.** **Status:** The status is mainly focused on monitoring the progress of the implementation of that task(s) as it progresses toward the completion date.

12**.** **Linkage to global plan initiatives (GPIs)*:*** The 23 GPIs, as described in the Global Plan, provide a global strategic framework for planning for air navigation systems and are designed to contribute to achieving the regional/national performance objectives. Each performance objective should be mapped to the corresponding GPIs. The goal is to ensure that the evolutionary work process at the State and regional levels will be integrated into the global planning framework.

APPENDIX C

REGIONAL/NATIONAL PERFORMANCE OBJECTIVE — IMPLEMENTATION OF THE NEW ICAO FPL FORM

Benefits	
Environment	• reductions in fuel consumption
Efficiency	• ability of air navigation service providers t make maximum use of aircraft capabilities • ability of aircraft to conduct flights more closely to their preferred trajectories • facilitate utilization of advanced technologies thereby increasing efficiency • optimized demand and capacity balancing through the efficient exchange of information
Safety	• enhance safety by use of modern capabilities onboard aircraft

Strategy

Short term (2010)

Medium term (2011 - 2015)

ATM OC COMPONENTS	TASKS	TIMEFRAME START-END	RESPONSIBILITY	STATUS
SDM	***En-route airspace***	2009-2012		
	• ensure that the automation and software requirements of local systems are fully adaptable to the changes envisaged in the new FPL form	2009		
	• ensure that issues related to the ability of FDPS's to parse information correctly and to correctly identify the order in which messages are received, to ensure that misinterpretation of data does not occur	2009-2012		
	• analyze each individual data item within the various fields of the new flight plan form, comparing the current values and the new values to verify any problems with regard to applicability of service provided by the facility itself or downstream units	2009		
	• ensure that there are no individual State peculiarities or deviations from the flight plan provisions	2009-2012		
	• ensure that the accepting ATS Reporting Office accepts and disseminates all aircraft capabilities and flight intent to all the downstream ACCs as prescribed by the PANS-ATM provisions	2012		

	• plan the transition arrangements to ensure that the changes from the current to the new ICAO FPL form occur in a timely and seamless manner and with no loss of service	2009-2012		
	• in order to reduce the change of double indications it is important that any State having published a specific requirement(s) which are now addressed by the amendment should withdraw those requirements in sufficient time to ensure that aircraft operators and flight plan service providers, after 15 November 2012, use only the new flight plan indications.	2009-2012		
	• establish a central depository in order to track the implementation status and inform the ICAO regional offices on an ongoing basis	2009		
linkage to GPIs	GPI/18 Aeronautical Information			

APPENDIX D

EXPECTED OUTPUTS OF ICAO WORK PROGRAMME FOR TRANSITION FROM AIS TO AIM

D2-INF-AIM ─ Aeronautical Information Management

ID	*Expected output*	*Source*	*Final results*	*Completed*
1.	Global strategy/roadmap for the transition from AIS to AIM.	A36–WP/321	State letter/Guidance material	2008 (Draft)
2.	SARPs and guidance material related to the provision of a standard aeronautical information conceptual model and standard aeronautical information exchange model to enable the global exchange of data in digital format. Definition of a means to allow the further evolution of these models in a managed and supportable manner.	A36–WP/321	Amendments 36/37 to Annex 15 Amendments 56/57 to Annex 4 New manual and amendment Defined means to allow the further evolution of the models	2010/13 2010/13 2010/13 2010
3.	SARPs and guidance material related to an appropriate presentation of digital aeronautical information to the end user, including eAIP, electronic charts and use of GIS within the context of AIM.	A36–WP/321	Amendments 36/37 to Annex 15 Amendments 56/57 to Annex 4 Amendments to Doc 8126 Amendments to Doc 8697	2010/13 2010/13 2010/13 2010/13
4.	Guidance material and further development of SARPs related to the quality system to support AIM.	A36–WP/321	New AIM quality system manual Amendment 36 to Annex 15	2010 2010
5.	Review of SARPs and guidance material related to electronic terrain and obstacle data to determine if refinement of SARPs or additional guidance material is necessary.	EANPG Conc. 49/39	Amendment 36 to Annex 15 Amendment to Doc 9881	2010 2010
6.	Guidance and training material related to staffing and training for the transition from AIS to AIM.	A36–WP/321	New AIM training manual Amendment to Doc 8697	2010 2010
7.	Development of a proposed work plan to consider key legal and institutional issues raised during the Worldwide Symposium on Enabling the Net-Centric Information Environment (Montreal, 2 to 4 June 2008)	A36–WP/321	AN-WP	2009

APPENDIX E

SYNOPSIS OF "TEAL" AND "NOAA" AIRCRAFT STORM OPERATIONS AND REQUIRED SUPPORT

a) The Delay Area is a weather area of interest to the Hurricane Center. In this area the aircraft's mission is to either determine whether a low pressure weather system is developing or if there is an active tropical depression, tropical storm or hurricane in order to collect and transmit weather data to the Hurricane Center for input into their computer models. This data is used to forecast the development, movement and intensity of the weather system. The Delay Area is a geographic area defined by:

(i) Delay Area center coordinates.

(ii) NM radius around center coordinates (typically 150 NM radius with operations not conducted over land unless in direct communication with ATC and with diplomatic clearance approval).

(iii) Block altitude below FL150.

b) Operating Procedures in the Delay Area.

(i) TEAL and NOAA aircraft will provide their own separation from each other while in the Delay Area. This separation is through a Letter of Agreement (LOA) between these operating agencies.

(ii) Area Control Centers (ACCs) will provide normal IFR separation for TEAL and NOAA aircraft from "other" aircraft traffic.

c) Communication with ATC.

(i) Before flight – filing flight plan, communication between FAA Command Center and affected ACCs and Enhanced Traffic Management System (ETMS) flow evaluation area (FEA) input.

(ii) Before flight – coordination with "warning" or "restricted" Area Control Agencies.

(iii) In Flight - with ACC facilities while in Delay Area.

(iv) In flight - with "other" aircraft transiting Delay Area.

d) Hazards to Safe Flight Operations.

(i) "Other" aircraft transiting Delay Area.

(ii) "Warning" or "restricted" areas.

(iii) Helicopter operations around oil platforms.

(iv) Environmental hazards (e.g. volcanic activity).

e) Goal-reduce hazards to safe flight operations through the use of:

(i) Continuous IFR operations – en route, while in delay area, exiting delay area.

(ii) Continuous Communications with ATC facilities (VHF, HF and SAT phone).

(iii) Flexibility to change Delay Area quickly.

(iv) After the mission is complete or in case of an aircraft emergency the ability to receive a revised flight plan clearance to return to destination or divert field.

f) Requested support.

(i) Contact phone numbers – Directly to ACC, Terminal Control Facilities, and Warning Area Controlling Agencies. These numbers will be used before flight and while airborne during operations.

(ii) Meetings with ACC agencies to coordinate operational requirements and procedures.

(iii) Written procedures approving or coordinating any unusual or unique aspect of Hurricane Hunter aircraft operations in support of the United Nations World Meteorological Organization, Caribbean and Central American Nations and the United States National Hurricane Center's efforts to provide accurate and timely forecasts for the region.

g) National Hurricane Operations Plan is available on the web: http://www.ofcm.gov/nhop/08/nhop08.htm. Please reference chapter 5, paragraphs 5.5.4 and 5.5.5 for current FAA and aircraft operations coordination and operating procedures.

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Agenda Item 3 Regional air navigation planning and implementation issues

3.1 Report of the Institutional Aspects

3.1.1 The Meeting took note that the Institutional Aspects Task Force had held 3 meetings in which it had fulfilled its tasks with the support of Project RLA/98/003 and the seminars sponsored by the latter, obtaining following results:

1. A CAR/SAM strategy for the implementation of multinational facilities.

2. Study of various implementation options. The implementation of multinational facilities through a Regional Multinational Organization (RMO) was recommended.

3. Identification of systems subject to implementation as multinational facilities.

4. Definition of the operational scenarios where multinational systems would be implemented.

5. Preliminary cost-benefit analyses.

6. Generic document on a draft agreement for the establishment of an RMO.

7. Recommendation on technical assistance mechanisms for the implementation of an RMO.

3.1.2 The Meeting recognized that in view of the complexity involved in the implementation of multinational facilities, which required a multidisciplinary approach to technical/operational, institutional, legal, and economic matters, and the existence of political elements that needed to be harmonized in order to conduct planning activities, the work done by the Task Force at its three meetings had been fruitful and efficient.

3.1.3 The Meeting conducted a detailed review of the Terms of Reference and the six tasks of the Task Force and noted that three of these had been completed, two could be suspended, and one was no longer valid given ICAO plans for eANP implementation. Based on the analysis, the Meeting agreed that the Task Force had developed the guidance material required, that the necessary conditions for the establishment of multinational facilities had been created, and a mechanism had been recommended to allow interested States/Territories/Organizations to implement multinational facilities. Therefore, the Meeting agreed that for the time being there was no need for GREPECAS to carry out any additional activities related to institutional aspects. In light of the above, the Meeting adopted the following decision:

DECISION 15/3 DISSOLUTION OF THE INSTITUTIONAL ASPECTS TASK FORCE

Taking into account the results of the work done by the Institutional Aspects Task Force, and that for the time being GREPECAS would not need to carry out additional activities on this matter:

a) the Institutional Aspects Task Force is dissolved; and

b) GREPECAS acknowledges the members of the group for the important work done and the significant results obtained regarding multinational facility implementation planning.

3.2 Report of the AVSEC/COMM/6 Meeting

3.2.1 The Meeting acknowledged the ICAO Council decision to remove aviation security (AVSEC) issues from the GREPECAS mechanism; it was informed that the AVSEC Committee will continue its work and activities from past meetings as an independent ICAO NAM/CAR/SAM AVSEC/FAL Group with direct coordination with ICAO Headquarters. The Meeting encouraged States/Territories to recognize the significant importance of AVSEC matters and to support the security entities under their administration to ensure the effective implementation of the Standards and Recommended Practices of Annex 17 of the Chicago Convention.

3.2.2 After this explanation, the Meeting was informed of the results of the AVSEC/COMM/6 Meeting held in Puerto Vallarta, Mexico, from 22 to 25 July 2008. The Meeting took note that the AVSEC/COMM/6:

a) reviewed and up-dated the conclusions of the AVSEC/COMM/5 and GREPECAS/14;

b) took note that not all the proposed tasks were completed since not all States take action or respond in a timely manner, and urged States to participate and provide proper attention and take timely actions;

c) urged States that had not yet formalized their National Civil Aviation Security Programme (NCASP) and all other related security programmes to do so as soon as possible, and ensure delivery of the pertinent parts of the NCASP to all aviation security stakeholders in order to ensure proper implementation of national regulations in their States;

d) was informed that ICAO continues AVSEC training through the Aviation Security Training Centres (ASTCs) and through the ICAO/Transport Canada *"Awareness Training Programme on Aviation Security - Phase II"* along with the schedule for workshops and courses for 2008 and 2009;

e) noted that ICAO continues recruiting professionals in the AVSEC field from States as short term experts (STEs) to perform, on behalf of ICAO, security assistance and training missions;

f) was informed that the Inter American Committee against Terrorism (CICTE) continues supporting all ICAO training events, providing fellowships for the NAM/CAR/SAM Regions;

g) was briefed regarding the activities and results of the development of the Universal Security Audit Programme (USAP) in the NAM/CAR/SAM Regions, the need for States to ensure implementation of their corrective action plans in compliance with the Standards and Recommended Practices of Annex 17, and to take provisions for the USAP second cycle audit;

h) took note of the initiative that Colombia presented on behalf of the Group of Experts on Aviation Safety, Security and Assistance (GEASSA) regarding the certification or licensing of civil aviation authority inspectors and/or auditors, separate from the requirement for AVSEC screener certification required by Annex 17;

i) was informed regarding the conclusions from the Passenger/Cabin Baggage Task Force Meeting (AVSEC/PAX/BAG) and the results of the Screening Seminar-Workshop for the NAM/CAR/SAM Regions held in Montego Bay, Jamaica, 28 to 30 January 2008;

j) took note of the conclusions from the Cargo Security Task Force Meeting (AVSEC/Cargo/TF); and

k) was informed regarding the separation of the AVSEC/COMM from the GREPECAS mechanism and its future activity for continued assistance and the promotion of regional cooperation among States/Territories and international organizations, and to actively support the ICAO AVSEC Plan of Action and other regional AVSEC initiatives, initiative that was supported by the States.

3.2.3 The Meeting recognized the importance of implementing a secure network to exchange aviation security information and the initiative presented by Colombia on behalf of GEASSA regarding the benefits of having a Secure Shared Information Network (SIN). The Meeting also took note that the first phase feasibility studies conducted by Canada and a consultant for the construction of the SIN demonstrated the viability of the project.

3.2.4 The Meeting recognized the sensitivity of the potential threats to civil aviation from the man-portable air defense systems (MANPADS) and the importance for States to provide training for personnel on this matter in order to conduct assessments at all of their airports to mitigate potential threats. The Meeting determined to send this task to the new AVSEC/FAL/COMM.

3.2.5 The Meeting congratulated the work accomplished by the AVSEC/COMM and encouraged States to participate and support the activities of the new NAM/CAR/SAM AVSEC/FAL/COMM in order to comply with Strategic Objective B - Enhance Global Civil Aviation Security. The Meeting also acknowledged the gracious offer from Colombia to host the first meeting of the new NAM/CAR/SAM AVSEC/FAL/COMM.

3.3 Report of the AERMET/SG/9 Meeting

3.3.1 The Meeting reviewed the action taken on the MET meeting reports as regards GREPECAS Decision 7/1 – *Study to determine the need for VOLMET services in the CAR/SAM Regions*, as a follow-up on Conclusion 5/18 of the CAR/SAM RAN/3 (Buenos Aires, Argentina, 1999). As a result of this review, and the costs involved for airlines, the Meeting formulated the following conclusion:

CONCLUSION 15/4 D-VOLMET AERONAUTICAL DATA LINK REQUIREMENTS IN THE CAR/SAM REGIONS

That the ICAO NACC and SAM Offices, in coordination with the ICAO SAM Office, amend Part VII Vol. I – ATS of the ANP to reflect the requirement for D-VOLMET aeronautical data link services in the CAR/SAM Regions.

Implementation of the World Area Forecast System (WAFS)

3.3.2 The Meeting was pleased to note that spatial and time resolution of all WAFS forecasts would increase to 1.25 degrees, and from 6 to 3 hours, respectively; that three additional upper wind and temperature forecasts for flight levels (FL) FL 270 (350 hPa), FL 320 (275 hPa), and FL 360 (225 hPa) would be included; and that the migration would be from GRIB 1 to GRIB 2 code form to enable operational implementation of the new upper wind and temperature forecasts and of the new WAFS icing, turbulence and convective cloud (ICE/TURB/CB) forecasts, as well as greater data volume in a fixed bandwidth.

3.3.3 In order to foster the correct use of the new icing, turbulence and convective cloud forecasts in GRIB code form, the Meeting deemed it necessary to conduct regional training seminars and to develop appropriate guidelines that could be available for WAFS users on the WAFSOPSG website. Accordingly, it formulated the following conclusion:

CONCLUSION 15/5 TRAINING FOR CAR/SAM STATES ON THE DETAILS AND USE OF NEW WAFS ICING, TURBULENCE AND CONVECTIVE CLOUD FORECASTS DERIVED FROM GRIB 2 DATA

That the Washington WAFC, in coordination with WMO, be invited to:

a) starting in 2010 or 2011, provide computer-based training on the applications and use of the new forecasts issued by the WAFS provider States;

b) assist the States in English, as necessary; and

c) assess the possibility of providing future training on the operation and use of the new WAFS products in English and Spanish.

3.3.4 Likewise, the Meeting took note that the WAFS provider State was planning to expand and improve telecommunication services in its area of responsibility and award the ISCS-G3 contract in early 2009. Once the contract was awarded, a detailed transition schedule and advisory bulletins would be posted on the ISCS webpage (http//:www.weather.gov/iscs) to keep ISCS users informed about transition developments. Considering that the Washington World Area Forecast Centre (WAFC) provider State was planning to make significant improvements to ISCS broadcasts, and in order to keep the States informed on the progress made, the Meeting formulated the following conclusion:

CONCLUSION 15/6[*] UPDATE ON THE PROGRESS MADE IN ISCS BROADCAST IMPROVEMENTS BY THE WASHINGTON WAFC PROVIDER STATE

That the Washington WAFC provider State be invited to provide timely reports on planned changes to upgrade ISCS-G3 broadcast, taking into account:

a) the resources provided by the States that need to switch over to ISCS-G3; and

b) the provision of specifications to be met by the States.

Note: To keep States informed, the Washington WAFC provider State will use the ISCS list of contacts, which is kept updated by the Secretariat.

3.3.5 Regarding the harmonization of ISCS (Washington WAFC) and SADIS (London WAFC), which includes OPMET messaging, the group took note that ISCS workstation users would have to update the list of products allowed in the workstations so that the information could be accepted by the system. Since most of the ISCS and SADIS OPMET information would be harmonized by 31 August 2008, GREPECAS agreed to formulate the following conclusion:

CONCLUSION 15/7* DATA MANAGEMENT REPORTS

That the WAFS provider State continue providing reports on data management over their circuits, the scheduled transition date, and the scope of product changes.

*Note: A DM example is provided in **Appendix A.***

3.3.6 Similarly, and taking into account that the Washington WAFC would need to update the workstations to accommodate the changes for the new OPMET data, the Meeting formulated the following conclusion:

[*] Approved through GREPECAS fast track mechanism

CONCLUSION 15/8 UPDATE TO WAFC WORKSTATIONS TO INTRODUCE CHANGES TO OPMET DATA

That:

a) the Washington WAFC provider State provide States and workstation vendors the necessary information on changes to the broadcast of products over the ISCS;

b) States take the necessary action to update their workstations for the cut-over planned for 31 August 2008, to input the set of OPMET data; and

c) States review the existing maintenance service contract for their ISCS workstations, which should provide the necessary support to update the database management programme.

Note: The Washington WAFC provider State and the ICAO Regional Offices had taken the necessary action in August 2008, to minimize the impact of these changes on ISCS users.

3.3.7 Based on the implementation plan for the transition from GRIB 1 to GRIB 2 code form adopted by the WAFSOPSG (Decision 4/18), the Meeting agreed that in order to ensure the reception of the new WAFS icing, turbulence, and convective cloud forecasts and the smooth migration from GRIB 1 to GRIB 2 code form, CAR/SAM States should take the necessary steps to provide training and to upgrade WAFS workstations. Accordingly, it formulated the following conclusion:

CONCLUSION 15/9 IMPLEMENTATION PLAN FOR THE TRANSITION FROM GRIB 1 TO GRIB 2 CODE FORM

That States take note and appropriate action with respect to the transition plan for the implementation of the GRIB 2 code form adopted by the Fourth Meeting of the WAFS Operations Group (WAFSOPSG/4) presented as **Appendix B** to this part of the Report.

Implementation of the International Airways Volcano Watch (IAVW)

3.3.8 The Meeting took note of the updates to Doc 9766-AN/968, *Handbook on the International Airways Volcano Watch (IAVW) - Operational Procedures and Contact List*, and recalled that the referred handbook included the operational procedures and necessary guidelines for the dissemination of information on volcanic eruptions and associated volcanic ash clouds, which could affect routes used by international flights, as well as the pre-eruption measures to be taken. In this regard, the Meeting agreed that there was a need for full implementation of this document by meteorological authorities and for the establishment of letters of agreement between the parties involved. Consequently, it formulated the following conclusion:

CONCLUSION 15/10 LETTERS OF AGREEMENT BETWEEN CIVIL AVIATION AND METEOROLOGICAL AUTHORITIES AND THE VULCANOLOGICAL AGENCY

That in order to promptly notify all the parties involved and to mitigate the hazard to air operations within the first few hours following an eruption:

a) States make full use of Doc 9766-AN/968, *Handbook on the International Airways Volcano Watch (IAVW) - Operational Procedures and Contact List*; and

b) establish letters of agreement between the parties involved; in particular, the civil aviation and meteorological authorities and the volcanological agency, specifying the agreed responsibilities of each party.

Note: A sample letter of agreement is presented in Appendix A to Doc 9766-AN/968.

3.3.9 The Meeting also agreed to recommend that meteorological authorities, air-traffic service authorities, and volcano observatories (VO) within each State coordinate their activities concerning the provision and exchange of information on volcanic ash, using the guidance contained in Annex 3, Annex 15, the ANP FASID, and the *Handbook on the International Airways Volcano Watch*. In this regard, the Meeting agreed to formulate the following conclusion:

CONCLUSION 15/11 IMPLEMENTATION OF THE VOLCANO OBSERVATORY NOTICE FOR AVIATION (VONA) FORMAT

That ICAO urges the States to implement the VONA format in order to:

a) improve the transfer of information on volcanic activity to the ACC/FIC, the VAAC, and MWO; and

b) provide feedback on the usefulness of the VONA and the adjustments to be considered by the International Airways Volcano Watch Operations Group.

SIGMET Implementation

3.3.10 The Meeting recalled that problems had been detected with the implementation of Meteorological Watch Offices (MWO) in the CAR/SAM Regions and that the temporary delegation of responsibilities from one MWO to another had been a complicated issue. It was also felt that if an MWO was temporarily out of service, another one should take on its functions as soon as possible. Consequently, it agreed that in order to ensure the provision of back-up services without further delays, the designation of the back-up MWO(s) should appear in the *Regional SIGMET Guide* and formulated the following conclusion:

CONCLUSION 15/12 BACK-UP MWOs IN THE CAR/SAM STATES

That, in order to improve the implementation of an MWO in case of lack of service or service outage, the NACC and SAM Regional Offices compile a list of back-up MWOs to be included in the *CAR/SAM Regional SIGMET Guide*.

3.3.11 In view of the above, the Meeting agreed that the meteorological authorities should review their procedures, in particular those regarding meteorological watch offices, in order to inform the NACC and SAM Regional Offices about changes in contact information for the ACCs, NOFs, VOs or MWOs.

3.3.12 The Meeting reviewed the results of the SIGMET tests and agreed to conduct periodic SIGMET WV tests bi-annually in order to improve SIGMET implementation and formulated the following conclusion:

CONCLUSION 15/13 INCREASED FREQUENCY OF PERIODIC SIGMET WV TESTS

That, in order to maintain constant feedback and efficiency in the issuance of volcanic ash SIGMETs, the States, in coordination with the corresponding VAACs, carry out periodic tests with bi-annual frequency during the months of May and November. Tests should last 48 hours.

3.3.13 The Meeting also agreed that in order to mitigate the problems that still persist with the implementation of SIGMET information, it was necessary to carry out a seminar/workshop to assist CAR/SAM States with their efforts to eliminate this deficiency and formulated the following conclusion:

CONCLUSION 15/14 SEMINAR/WORKSHOP ON SIGMET INFORMATION

That ICAO, in coordination with WMO and VAAC provider States, organize a seminar on the preparation, issuance, and dissemination of SIGMET information.

Exchange of OPMET information

3.3.14 The Meeting agreed that in order to resolve the problems that still persisted with OPMET exchange, the States/Territories that had not yet done so, should take the utmost effort to implement the actions recommended in the COM/MET SIP and the associated GREPECAS conclusions.

3.3.15 Similarly, the Meeting took note that the States that wished to implement the use of the public Internet for the applications specified in Doc 9855 - *Guidelines on the use of the public Internet for aeronautical applications*, would have to proceed to the accreditation of the Internet service providers

following the guidelines specified therein. It also recognized that the States, when using the public Internet for the exchange of OPMET information, should take into account the guidelines specified in Doc. 9855 - *Guidelines on the use of the public Internet for aeronautical applications*, as well as the proposal for amendment to Annex 3 on the use of public Internet (Chapter 11 and Appendix 10).

3.3.16 The Meeting noted that in order to identify the deficiencies related to the availability of OPMET information in the Brasilia International OPMET Bank, Brazil had conducted a comparative study of the availability of these messages during the period 10 to 16 June 2004 to 2008, and had identified a large number of omissions in OPMET messages, which had affected the provision of MET information to support international air navigation.

3.3.17 The Meeting noted that due to the fact that a new TAF format would be introduced as of 5 November 2008, States should revise the existing procedures for the provision and processing of the new TAF, and agreed to encourage States to provide models and to use the web page http://www.weather.gov/os/aviation/taf_testbed.shtml as a test bed. In this regard, the following conclusion was formulated:

CONCLUSION 15/15[*] TRANSITION TO THE NEW TAF FORMAT

That CAR/SAM States/Territories be encouraged to visit the NWS webpage in order to learn more about the TAF format changes and test their processors with the models provided.

Review of the CAR/SAM ANP/FASID, Part VI - MET

3.3.18 The Meeting noted that the MET Global database – Tables MET 1A and 2A - had been completed on 20 February 2008, and that since then the database was considered operational and was now a "master copy." Any change, except for editorial errors or omissions that could have occurred and that would require future amendments, would be subject to the standard process of amendment of the Basic ANP /FASID.

3.3.19 It was also noted that the new database was in alphabetical order and was based on Doc 7910 – *Location Indicators* and not on the FASID AOP Tables, and that some differences between the former FASID Tables and the new database had been detected. The Meeting also recalled that in Doc 7910 - *Location Indicators*, data on the indicators was in alphabetical order followed by the "name of the location" as in FASID Table AOP 1, where the name of the aerodrome was also included. However, during the review of database tables, it was noted that the information contained in Doc 7910 was not always aligned with the CAR/SAM FASID Table AOP 1.

3.3.20 Taking into account that in the future a global database would be developed for the AOP Table and, once operational, the MET database would be updated based on that table, the Meeting agreed that the CAR/SAM AOP Table and the information contained in Doc 7910 should be reviewed in order to harmonize the information contained in both documents. Accordingly, it formulated the following decision:

[*] Approved through GREPECAS fast track mechanism

DECISION 15/16 HARMONIZATION OF THE INFORMATION CONTAINED IN CAR/SAM FASID TABLE AOP 1 AND IN DOC 7910

That, in order to harmonize the information contained in Doc 7910 – *"Location Indicators"* and CAR/SAM FASID Table AOP 1, the ICAO NACC and SAM Offices carry out a detailed review of the information contained in both documents and, as necessary:

a) update and amend CAR/SAM FASID Table AOP 1 in accordance with the ICAO amendment procedures; and

b) request ICAO to update Doc 7910.

3.3.21 The Meeting took note of the review and update of Tables MET 1A and MET 2A of the database, as well as of the regional meteorological procedures in Part VI – Meteorology of the CAR/SAM Basic ANP/FASID (Doc 8733), in accordance with current practices of the operational requirements in the CAR/SAM Regions, and proposed amendments to the FASID. Within this context, the following conclusion was formulated:

CONCLUSION 15/17 PROPOSAL OF AMENDMENT TO THE CAR/SAM ANP FASID, PART VI – MET

That the ICAO NACC and SAM Regional Offices amend Part VI – MET of the CAR/SAM *Facilities and Services Implementation Document* (FASID) as indicated in **Appendix C** to this part of the report.

3.3.22 The Meeting noted with concern that the implementation of Annex 3 provisions was being affected by the lack of guidance material in Spanish, and that the GREPECAS Aeronautical Meteorology Subgroup had developed guides to assist meteorologists and meteorology technicians to better perform their functions. Therefore, it was deemed necessary that the NACC and SAM Regional Offices identify and apply mechanisms for the development of MET training material and documentation in English and Spanish. Within this context, the following decision was formulated:

DECISION 15/18 IDENTIFICATION AND APPLICATION OF MECHANISMS FOR THE TRANSLATION OF MET TRAINING MATERIAL AND GUIDES

That the ICAO NACC and SAM Regional Offices identify and apply mechanisms for translation of digital modules and training material from English into Spanish, as well as the refresher material and guides prepared by the AERMET Subgroup.

3.4 Report of the AGA/AOP/SG/6 Meeting

3.4.1 The Meeting reviewed and took note of the report of the GREPECAS Aerodromes and Ground Aids/Aerodrome Operations Planning Subgroup (AGA/AOP/SG/6).

Aerodrome Maintenance

3.4.2 The Meeting took note of the new options proposed by the AGA/AOP/SG/6 for improving aerodrome maintenance in addition to deficient airport infrastructure design, especially regarding taxiways and runway surface conditions.

Emergency Plans and Emergency Operations Centres (EOCs)

3.4.3 The Meeting took note of the review made by the AGA/AOP/SG/6 on the status of Emergency Plans and Emergency Operations Centres (EOCs) in CAR/SAM States/Territories and the preparation of a Spanish language *"Guide for the Implementation of Airport Emergency Plans and Emergency Operations Centres (EOCs)"* as a result of the Workshop carried out in November 2006. Accordingly, the Meeting agreed that the *Guide for the Implementation of Airport Emergency Plans and Emergency Operations Centres (EOCs)* should be translated into English, through the appropriate means, and circulated to English speaking States for their information.

Aerodrome Certification/Safety Management Systems

3.4.4 Regarding the progress made by States/Territories with the implementation of aerodrome certification, the Meeting was apprised that several States, mainly from the CAR Region, had requested specific training on this topic. Accordingly, the Meeting adopted the following conclusion:

CONCLUSION 15/19 AERODROME CERTIFICATION TRAINING

That:

a) ICAO study the possibility of conducting a seminar/workshop on aerodrome certification in the CAR/SAM Regions with simultaneous interpretation in English and Spanish;

b) this seminar/workshop be carried out in 2010; and

c) ICAO urges States/Territories that still required training on this topic to send their technical staff to this event.

Annex 14 and the ICAO USOAP

3.4.5 The Meeting noted that the aerodrome audits conducted in the first 53 contracting States, which applied the Global Systems Approach, had revealed that many of the audited States had not yet certified or established a process to certify aerodromes nor had they ensured that aerodrome operators had implemented an SMS as part of their certification process.

Update of the Activities of the Latin American and Caribbean Airport Pavement Association (ALACPA)

3.4.6 The Meeting received information that ALACPA had been legally registered and had a current web page (www.alacpa.org) with access for current and future members. In the future, all documents for seminars and for General Assembly procedures will be available on this web page.

Update of the Activities of the CAR/SAM Regional Bird Strike and Wildlife Hazard Prevention Committee (CARSAMPAF)

3.4.7 The Meeting was informed of the activities carried out by CARSAMPAF, and that the Committee had elected a new governing board for the period 2008-2011. Information was also provided about the Sixth International Bird Strike and Wildlife Hazard Prevention Conference to be held in Brasilia, Brazil, 24-28 November 2008, jointly with the International Bird Strike Hazard Prevention Committee and the Brazilian Bird Strike Prevention Committee.

3.4.8 The Meeting considered that airlines should be part of CARSAMPAF in order to ensure continuity of the actions of this Committee in the CAR/SAM Regions. Consequently, the Meeting agreed that airlines should join the CARSAM Regional Bird Strike and Wildlife Hazard Prevention Committee. To this end, NACC and SAM Regional Offices will extend an invitation to the airlines through IATA.

Review of Matters Pertaining to the Air Navigation Plan

Amendments to the CAR/SAM Regional Air Navigation Plan

3.4.9 The Meeting was informed about amendments made in 2007 to the CAR/SAM Regional Air Navigation Plan on matters concerning air traffic services meteorology (MET) resulting from requirements for certain air routes and the text amendments generated by the WAFSOPSG/1 and GREPECAS/10 meetings, and the Secretariat.

Runway Strip and Runway End Safety Area Task Force

3.4.10 The Meeting was informed of the need for a closer relationship among aircraft operators, airport operators, and the corresponding civil aviation authority of each State/Territory.

3.4.11 In view of the above, the Meeting agreed to formulate the following conclusion:

CONCLUSION 15/20 NEW TEXT WITHIN PARAGRAPH 3.5, VOLUME 1, ANNEX 14 FOR RUNWAY END SAFETY AREAS (RESAS)

ICAO is requested to study the possibility of including supplementary wording in paragraph 3.5, Volume 1, Annex 14, allowing for special application of declared distances for use in runway lengths with excess paved areas to obtain RESAs, in compliance with ICAO requirements.

Adequacy of Airport Infrastructure

3.4.12 The Meeting took note of AGA aspects that were not being duly addressed and that were considered urgent due to the operational requirements of modern aircraft, including new large aircraft (NLA), which were more demanding on airport infrastructure. Consequently, a new task force was created to address this matter, and when the need did arise to deal with runway incursions, there were two groups that could address the issue.

Airport Demand/Capacity Task Force

3.4.13 The Meeting was informed on airport congestion problems during certain periods of the day, that a significant number of reported accidents/incidents were due to deficient apron management, and that it had been shown that there were conflicts among the various entities operating on the apron. A survey had been conducted by the two ICAO Regional Offices to analyze apron congestion and its control by the authority, as well as SMS implementation. Based on the results, the Meeting adopted the following conclusion:

CONCLUSION 15/21 SEMINAR ON AIRPORT DEMAND/CAPACITY FOR THE CAR/SAM REGIONS

That:

a) the ICAO NACC and SAM Regional Offices organize a seminar on Airport Demand/Capacity for the CAR/SAM Regions to be held in 2010, taking into account the main factors that impact airport capacity such as air traffic services, types of aircraft that are operating, weather conditions, and others; and

b) ICAO urges States/Territories, airport operators and international organizations to send their technical officials and experts to participate in this event.

AGA Aeronautical Studies

3.4.14 The Meeting received information about a questionnaire regarding aeronautical studies for airport environment(s), which was developed to gather useful information that could be used to guide the activities of the Task Force. Based on the analysis of this questionnaire, the Meeting formulated the following decision:

DECISION 15/22 SURVEY ON AERONAUTICAL STUDIES IN THE AGA FIELD

That the Regional Offices circulate the questionnaire contained in **Appendix D** of the AGA/AOP/SG/6 Final Report to the States/Territories and international organizations, which should be completed and submitted to NACC and SAM Regional Offices not later than 30 March 2009.

Review of Other Technical Matters

ICAO Global Air Navigation Plan (Global Plan)

3.4.15 The Meeting was informed about the implementation of the recommendations from the Eleventh Air Navigation Conference, which included the topic, "*Global ATM – From Concept to Reality,*" and which led to the conclusion to encourage industry partners to work together in the development of common roadmaps or global action plans for inclusion in the Global Plan. It also took note of the inclusion of the AIS(AIM)/AGA/MET areas in the revised version of the Global Air Navigation Plan (GANP), and that in the AIS (AIM) area, there was a need to correct obstacle height reports and their location with respect to runway ends for the proper development of the GANP. In light of the discussions held, the Meeting formulated the following conclusion:

CONCLUSION 15/23 LOCATION OF OBSTACLES

That the respective States/Territories determine the elevation and location of obstacles in the runway approach areas and update AIP information by the next meeting of the AGA/AOP/SG.

Introduction of Amendments to Annex 14

3.4.16 The Meeting took note of three proposals for amending Annex 14, Volumes I and II.

Progress made by the AGA/AOP Subgroup regarding CAR/SAM RAN/3 Conclusions and other important topics for the CAR/SAM Regions

3.4.17 The Meeting took note of the progress made by the AGA/AOP Subgroup regarding its activities on the conclusions of the CAR/SAM RAN/3 meeting and other matters of importance to the CAR/SAM Regions as contained in **Appendix E** to this part of the Report.

ICAO Regional and Global Activities in the AGA Field

3.4.18 The Meeting took note of the main activities to be carried out in the AGA field during the next few years and of the post-graduate courses organized by the *Instituto Politécnico Nacional (IPN)* and the Universidad *Nacional Autónoma de México (UNAM)* in coordination with *Aeropuertos y Servicios Auxiliares (ASA)*, the three Mexican entities.

Other Matters

3.4.19 Information on concerns regarding the practical application of Annex 14, Vol. I was presented. As a result, the Meeting adopted the following conclusion:

CONCLUSION 15/24 IDENTIFICATION OF MARKING PAIRS TO BE ELIMINATED

That ICAO identify which of the touchdown zone coded distance marking pairs should be eliminated when the available landing distance or the distance between thresholds is less than 2.400 m. In this respect, the GREPECAS AGA/AOP/SG suggests to eliminate the markings that are closer to the runway centre line.

3.4.20 Likewise, the Meeting adopted the following conclusion:

CONCLUSION 15/25 COMPATIBILITY OF ENGLISH AND SPANISH WORDING IN ANNEX 14, VOL. I, PAR. 5.2.5.4

That ICAO reviews the wording in the English and Spanish versions of paragraph 5.2.5.4 of Annex 14, Vol. I, in order to harmonize both versions.

Administrative Matters

3.4.21 The Meeting was informed that the Subgroup has foreseen to celebrate the AGA/AOP/SG/7 in August/September 2009. Both Argentina and Mexico have offered to host the referred event.

3.5 Report of the AIM/SG/11 Meeting

3.5.1 The Meeting was informed on the work carried out by the Eleventh Meeting of the Aeronautical Information Management Subgroup (AIM/SG/11) held in Bogotá, Colombia, from 16 to 20 June 2008, with the participation of 47 delegates from 16 member States of the Subgroup, 2 representatives from the United States NGA, as well as 4 international organizations (COCESNA, IATA, ALTA, and CNAC) as observers and 2 service providers (JEPPESEN, USA and IDS, Italy). The Subgroup approved 9 draft conclusions submitted for the consideration of the Meeting.

3.5.2 The Meeting reviewed and updated the list of GREPECAS conclusions and decisions in the AIM field (AIS/MAP) based on the action taken by the Air Navigation Commission with respect to the reports of the GREPECAS/12, GREPECAS/13 and GREPECAS/14 meetings and outstanding AIM conclusions. It should be noted that while reviewing these conclusions, the Subgroup agreed to update some of them.

3.5.3 The Meeting discussed the transition of AIS/MAP to the new aeronautical information management (AIM) concept, which establishes various stages for controlling aeronautical information/data from its origin through storage, recovery, exchange and delivery of digital aeronautical information (AIM), taking into account pre-flight, in-flight, and post-flight planning. It was also deemed necessary to apply a "strategy" for planning, managing, and expediting AIS-to-AIM transition. To that end, States/Territories should bear in mind that in terms of quality, consistency, and timeliness of the data handled by the AIS during this transition stage, stringent requirements for the exchange of digital information must be met. In this regard, the following conclusions were formulated:

CONCLUSION 15/26 TRAINING SEMINARS/WORKSHOPS IN SUPPORT OF THE TRANSITION FROM AIS/MAP TO AIM

That ICAO be urged to assist States/Territories with conducting at least 2 seminars and/or workshops on matters related to AIM transition and to include said events in technical cooperation projects that ICAO Regional Offices are carrying out in support of air navigation services.

CONCLUSION 15/27 ADOPTION OF THE DRAFT STRATEGY FOR THE TRANSITION TO AIM

That CAR/SAM States adopt the first version of the *"Draft Strategy for the Transition to AIM"* prepared by the AIM/QM/TF.

Note: The document mentioned in the above conclusion will be available on the NACC Regional Office website www.mexico.icao.int, soon; this will be informed to States through a letter and messages to the respective AIM (AIS/MAP) Areas.

3.5.4 As a pre-requisite to AIM transition, States that have not yet done so must assign high priority to the implementation of Annex 15 Standards and Recommended Practices (SARPs) and, in particular, those related to the World Geodetic System - 1984, and automation and quality management system(s). Those issues become essential for the transition to the AIM. In this regard, the following conclusions were formulated:

CONCLUSION 15/28 PRIORITY IN THE APPLICATION OF MEASURES FOR THE MIGRATION FROM AIS/MAP TO AIM SERVICES

That civil aviation authorities of CAR/SAM States, Territories, and International Organizations assign high priority to the implementation of the Standards and Recommended Practices (SARPs) contained in Annex 4 and Annex 15, and that:

a) the Secretariat of the AIM/SG prepare a survey on the status of implementation of ICAO SARPs in the AIM field (AIS/MAP) and send it to CAR/SAM States, Territories and International Organizations;

b) States, Territories, and International Organizations send their replies to the accredited CAR and SAM Regional Offices not later than **31 May 2009**; and

c) if no answer is received by the date mentioned in item b), the respective SARPs be considered as **NOT IMPLEMENTED**.

CONCLUSION 15/29 DATE OF AIRAC SYSTEM

That States, Territories and International Organizations of the CAR/SAM Regions:

a) publish an AIC each year that includes AIRAC based on effective dates of the aeronautical integrated documentation package, which includes the AIRAC system application in support of efficient use of the mentioned system, as well as the important impact that the system has on operational safety;

b) publish aeronautical information that introduces significant changes impacting air navigation systems at least 56 days prior the effective date; and

c) notify the NACC and SAM ICAO Regional Offices of the total implementation of the AIRAC system not later than **31 July 2009**.

3.5.5 The Meeting also took note of the importance for wide dissemination of the ICAO *Worldwide Symposium on Enabling the Net-Centric Information Environment* results held in Montreal from 2 to 4 June 2008, where legal and institutional matters related to the AIS-AIM transition were addressed.

3.5.6 The Meeting was informed on the report of the Third Meeting of the Quality Management Task Force (AIM/QM/TF/3) and follow-up on the initiative for development of an implementation plan for AIM services quality management system(s). In this respect, it was noted that implementation of State and International Organization quality management systems for all work processes being carried out for development of the Integrated Aeronautical Information Documentation should be **certified under a Quality Management System** that ensures that available information processes meet ICAO/ISO precision, resolution and integrity requirements.

3.5.7 The Meeting received information on the document prepared by the QM/TF on analyzed human factor principles civil aviation safety risks. In this sense, items 4), 6) and 8) of ICAO Strategic Objective A related to AIM (AIS) services, are fundamental for the implementation of new technologies for processing and distribution of ordinary, essential and critical aeronautical data/information in both traditional (printed) and digital formats. In this respect, the Meeting formulated the following conclusion:

CONCLUSION 15/30 APPLICATION GUIDANCE OF THE HUMAN FACTORS PRINCIPLES IN AIS/MAP

That States/Territories/International Organizations adopt, as Part 5 of the *Guidance Manual for the implementation of a Quality System in the CAR/SAM AIS/MAP*, the Application Guidance of the Human Factors Principles in AIS/MAP.

3.5.8 In addition, the Meeting was informed on the CAR/SAM Regional guidelines document on the transition plan from AIS to the AIM prepared by the QM/TF. This document will be available on the ICAO NACC Regional Office website.

3.5.9 When reviewing the report of the Ninth Meeting of the Aeronautical Information Management Training Task Force (AIM/TRAIN/TF/9), note was taken of the task involving the conduct of a course for AIS/MAP based on AIM principles and human factor guidelines developed by the Quality Management Task Force. The Task Force reviewed the new *ICAO AIS Training Manual* and updated the AIS/021 Regional Standard Programme, adjusting it to the new AIM concept for implementation in the CAR/SAM Regions.

3.5.10 Revision and follow-up of the *Guidance Material for the implementation of a Quality Management System of Aeronautical Information Management (AIM) in the CAR/SAM Regions, Part 4 – Selection, Competency, Training, and Re-qualification of AIS/MAP personnel (AIM)* was made, as well as the revision of the curricula and second-generation modules of the CAR/SAM AIS/021 course, the

future CAR/SAM AIS/024 course and also a thorough review of the *Guide on Responsibilities and Functions of AIS/MAP Personnel*, to make it consistent with the new Aeronautical Information Management (AIM) concept. Lastly, the AIM Subgroup, through the Task Force, agreed to study and define the basic criteria to ensure the development of a technical English language training programme for AIS/MAP personnel of CAR/SAM States/Territories.

3.5.11 The Meeting was informed on the First Meeting of the Electronic Aeronautical Chart Task Force concerning Aeronautical Information Management (AIM/e-MAP/TF/1), where it was considered that ICAO should develop technical cooperation projects for availability by the first quarter of 2009. This will permit the production of VFR 1:500.000 y 1:1.000.000 electronic aeronautical charts by approximately 2015.

3.5.12 The Meeting also took note that the e-MAP Task Force deemed it advisable to circulate a survey, which will be sent to States/Territories/International Organizations through the Secretariat of the AIM Subgroup, in order to determine the difficulties involved with implementation of e-TOD and electronic aeronautical charts. The responses obtained will be analyzed at the next meeting of this Task Force and will provide basic information on the level of implementation of the e-TOD in order to orient the necessary resources to the States.

3.5.13 The Meeting considered the approval of a conclusion so that actions can be taken regarding AIS/AIM system based sensitive military, national security, airline, commercial airport, or industrial data. Only through full support by all participants of the information process will it be possible to properly protect sensitive data by taking the necessary measures to prevent unauthorized use, applying restricted access methods to critical revision and control operations, and implementing a way to identify adverse circumstances that might affect aeronautical information management. In this respect, the following conclusion was formulated:

CONCLUSION 15/31 RESTRICTED ACCESS IN AREAS WHERE AERONAUTICAL INFORMATION/DATA IS MANAGED IN WEB SERVERS AND NOTAM AND GIS DATA BASES

That CAR/SAM States/Territories/International Territories take the following steps to protect the security of essential and critical information in the AIS/MAP and NOTAM areas by establishing:

a) restricted access in spaces reserved for communications, data base servers and any other essential and critical information exchange equipment; and

b) sufficient information technology firewalls in system data bases, network accesses and any other means that could permit alteration of sensitive information, which could turn into a safety risk.

3.5.14 The Meeting was aware that CAR/SAM States, Territories, and International Organizations were requested to audit their AIPs using the AAA (AIP Audit Assistant) tool developed by EUROCONTROL. Through this audit concept, which consists of a set of checklists that correspond to each AIP item (GEN, ENR, AD), it is possible to identify inconsistencies in parts of the AIPs that would be undetectable without a rigorous systematic tracking procedure.

3.5.15 The Meeting was informed on the World Symposium on Enabling the Net-Centric Information Environment regarding implementation of network information environments, and that the documentation from that symposium was available at: *http://www.icao.int/netcentric/documentation.htm*.

3.5.16 It was also mentioned that for the international exchange of information, paragraph 3.6.1 of Annex 15 contains a standard that specifies that it is fundamental for Spanish-speaking States to take action regarding the production of an integrated aeronautical information package in the English language for international distribution, with special emphasis on NOTAM information; there are several projects in this regard.

3.5.17 The Meeting noted that the technical requirements (SARPs) related to the transition from AIS to AIM, as well as the electronic display of AIP information and ICAO electronic aeronautical charts, are still under development by the panel at ICAO Headquarters with an estimated date of completion between 2010 and 2013. Likewise, there are models developed by EUROCONTROL and the United States such as the AICM/AIXM that have been extensively used for the exchange of aeronautical information. Therefore, consideration should be given to the need to review the documentation of said models, together with the model for the exchange of aerodrome charts (AMXM), and integrate them into AIM processes. Accordingly, the Meeting formulated the following conclusion:

CONCLUSION 15/32 FOLLOW-UP ON THE DEVELOPMENT OF MODELS FOR THE EXCHANGE OF INFORMATION/AERONAUTICAL DATA FOR AIM

That States, Territories, International and Organizations follow-up on the development of models for the exchange of information/aeronautical data for AIM in which ICAO has participation.

CONCLUSION 15/33 ACTIONS BY STATES FOR THE INTRODUCTION OF THE e-AIP DIRECTED TO AIXM

That CAR/SAM States/Territories and International Organizations, when considering the management concept for aeronautical information through electronic means, provide the necessary training to AIS/MAP (AIM) personnel in the management of information technology systems and in the Aeronautical Information Exchange Model (AIXM), in order to become familiar with the essential and critical electronic data management characteristics, as background towards the preparation of an e-AIP.

3.5.18 The Meeting received information on the Havana NASC positive experience with activation of their NOTAM Contingency Plan as a result of system failures due to adverse weather conditions and lightening strikes. The Meeting noted that the NOTAM contingency plans of States contained detailed measures in support of air traffic services contingency plans through an efficient exchange of NOTAM information at the national and international level, ensuring an uninterrupted flow of information that is important for air operations. The contingency situation was classified as Type B-Communication failure throughout the network (international connection *via* the AFTN).

3.5.19 The Meeting noted that the International NOTAM Offices of Havana and COCESNA conducted coordination to ensure continuity of the NOTAM service in the HAVANA FIR, thus applying the Havana NASC NOTAM Contingency Plan developed in 2005. This Contingency Plan supports Conclusion 12/99 of GREPECAS/12 regarding the establishment and implementation of NOTAM contingency plans in support of ATM contingency plans.

3.6 Report of the ATM/CNS/SG/6 Meeting

3.6.1 The Meeting took note that the Sixth Meeting of the GREPECAS ATM/CNS Subgroup (ATM/CNS/SG/6) was held in Boca Chica, Dominican Republic, from 30 June to 4 July 2008. The Meeting was attended by 69 representatives from 15 States, 6 international organizations, and one Member State from outside the CAR/SAM Regions.

Results of the ACG/7 Meeting and proposals for the future treatment of ATM and CNS Matters

3.6.2 The Meeting analyzed the consequences of ACG/7 Conclusion 7/03 regarding the restructuring of the ATM/CNS/SG and concurred with the comments made by the ACG/7 Meeting with regard to issues concerning the functions of the current ATM/CNS Subgroup and the structure of the ATM and CNS Committees. It also agreed that the Subgroup should be fully reconfigured, but that its dissolution and the creation of two new subgroups from the ATM and CNS Committees, as proposed by the ACG/7 Meeting, would mean a step backwards in the CAR/SAM planning process, having adverse effects on the close coordination between the ATM and CNS areas, which was essential for planning important CNS/ATM tasks in line with the operational initiatives of the Global Air Navigation Plan.

3.6.3 The Meeting agreed that for restructuring the Subgroup, consideration should be given to the creation of a subgroup within the framework of the GREPECAS Procedural Handbook in terms of its operation and reporting of results to GREPECAS. It also agreed that in order to ensure efficiency and proper coordination between the ATM and CNS fields, appropriate terms of reference should be established; from these, the specific and important tasks to be accomplished in the short and medium-terms for enhancing ATM could be inferred. Likewise, the need for coordination with other areas within the ATM operational concept, such as AGA, AIM and MET should be clearly identified. In order to fulfill these tasks, deliverables should be identified.

3.6.4 The Meeting took note that the ATM/CNS/SG/6 Meeting had developed a specific proposal for a new subgroup to be presented to the GREPECAS/15 Meeting. In developing the terms of reference for this new subgroup, the Meeting recognized that it was absolutely necessary to align its work with the activities being carried out worldwide and, specifically, with the Global ATM Operational Concept and the Global Air Navigation Plan. In this regard, it was agreed that the terms of reference should consider performance objectives, the development of detailed tasks, the definition of deliverables with completion dates, and implementation monitoring. It was also recognized that the work of all air navigation areas was being merged on a global basis, and that work had to be approached in a holistic and strategic way. Consequently, the Meeting agreed to develop terms of reference without separating the work of the CNS and ATM areas, and noted that in order to accomplish the work related to performance objectives, the efforts of both CNS and ATM areas would be necessary.

3.6.5 Taking into account the work programmes of the ATM/CNS Subgroup and of the ATM and CNS Committees, the Meeting defined the main tasks to be carried out by the new subgroup under the project development concept based on the performance objectives already established by GREPECAS. The Meeting also recognized the need to define other tasks, if applicable, in order to make regional improvements in the short and medium-term that might be required by the ATM community.

3.6.6 Furthermore, the Meeting recognized that this represented a big step towards a new CNS/ATM regional planning approach and the establishment of a new management scheme in which the role of the new subgroup would be essential for GREPECAS deliverables and its work programme. In this respect, the Meeting noted that in order to activate the mechanism of the new subgroup, at least two meetings would be needed before GREPECAS/16, one to develop the work programmes and to identify the task forces that would be required, and the other to monitor and make operational adjustments to the work programme established at its first meeting. With regard to this matter, the Meeting deemed it necessary to analyze in detail the number of meetings within the GREPECAS mechanism, in view of the financial impact on civil aviation authorities.

3.6.7 As a result o of the work carried out at the ATM/CNS/SG/6 Meeting on this matter, the Meeting formulated the following decision:

DECISION 15/34 NEW CNS/ATM SUBGROUP

That, in line with GREPECAS efforts to improve the treatment of ATM and CNS matters and the coordination required between these areas to ensure a performance-based approach to planning of a global ATM system, a re-engineering of the ATM/CNS Subgroup be carried out within the GREPECAS mechanism with the creation of the new CNS/ATM Subgroup and Terms of Reference as presented in **Appendix G** to Agenda Item 5 of this Report.

3.6.8 The Meeting recognized that the work carried out by the ATM/CNS Subgroup and by the ATM and CNS Committees should serve as a basis for the new subgroup so that it could properly deal with ATM and CNS matters in the CAR/SAM Regions at its first meeting and incorporate the tasks and results already available, mainly from the work carried out by the ATM and CNS Committees, into its activities.

3.6.8.1 The Meeting agreed that the new subgroup should consider developing Key Performance Indicators (KPIs) for monitoring its tasks. Also, when carrying out its tasks for short and medium-term implementation of ATM improvements, the subgroup should take into account the environmental benefits derived from ATM improvement to be introduced in keeping with the ATM Operational Concept. In this sense, the following task was added to those already identified by the ATM/CNS Subgroup:

"Identify the environmental benefits derived from short and medium-term ATM improvements."

3.6.9 Note was taken of the following automation activities that had been reviewed by the ATM/CNS/SG/6 Meeting:

a) the various activities of the NAM/CAR Working Group (NACC/WG) concerning radar data sharing, the proposal to use the current flight plan (CPL) for exchanging flight plan updates, the status of automation of control centre systems, and digital communication media developments in the region; and

b) the activities of Technical Cooperation Project RLA/98/003, which had carried out very interesting work and developed the corresponding action plan for automated ATC system interconnection equipment between ACCs implementation and the corresponding System Control Interface Document (SCID) for the exchange of radar/flight plan data and for AIDC communications pursuant to Regional Strategy Phases II and III. In this regard, the Meeting considered that the new CNS/ATM Subgroup should take into account the documentation developed by Project RLA/98/003 and other available ATM automation deliverables.

3.6.10 The Meeting discussed issues related to the transition to a new ICAO flight plan model. It also noted that the ICAO Secretary General, through State Letter AN 13/2.1-08/50, had informed States that the Air Navigation Commission had approved Amendment No. 1 to the 15th Edition of the PANS-ATM (Doc 4444) effective 15 November 2012, inviting States to implement the provisions contained in the aforementioned amendment. As to the new flight plan model, it can be downloaded from the following web page: www.icao.int/icaonet.

3.6.11 The Secretariat advised the Meeting that the ANC ATM Requirements and Performance Panel (ATMRPP) was developing guidelines in order to contribute to globally harmonized implementation of the new flight plan provisions. These guidelines would become available in due course. The Meeting agreed that many actions would be necessary to ensure regionally harmonized implementation, including the development of a regional transition strategy. In this regard, the Meeting initially identified the following actions:

- AIDC guidelines and other regional documents would need to be updated;
- contingency arrangements for States unable to meet the target date;

- gradual implementation by States and/or airspace users;
- repetitive flight plan management; and
- impact on electronic displays, including electronic flight progress strips.

3.6.12 Consequently, the Meeting formulated the following conclusion:

CONCLUSION 15/35 IMPLEMENTATION OF THE NEW ICAO FLIGHT PLAN MODEL

Considering that States should take measures to implement the new ICAO flight plan model pursuant to Amendment No. 1 to the 15th Edition of the PANS-ATM (Doc 4444), and in order to establish a regional strategy to facilitate global implementation of this amendment that:

a) based on the guidance material to be prepared by ICAO, CAR/SAM States/Territories and International Organizations take the necessary measures to prepare for the transition to the new flight plan model; and

b) the Subgroup establish a contributory body to develop a regional strategy for the transition to the new flight plan model in the CAR/SAM Regions and the provisions associated with ATS messages.

ATM Committee

3.6.13 The Meeting reviewed the results of the Sixth Meeting of the ATM Committee. It also analyzed the unresolved ATM and SAR deficiencies and outstanding GREPECAS Conclusions/ Decisions, as well as the reorganization and work programme of the ATM Committee.

Safety assessment of the CAR/SAM airspace after three years of RVSM application

3.6.14 The Meeting noted that total risk was due to the fact that approximately 93% of large height deviations (LHDs) were caused by errors in ACC unit-to-unit transfer message (M errors) and lack of coordination by transferring ATC units (N errors). It was recognized that these errors and not RVSM operations caused LHD events regardless of the vertical separation applied.

3.6.15 The vertical collision risk due to a combination of technical height-keeping errors and operational errors estimated in terms of number of fatal accidents per flight hour, exceeded the acceptable target level of safety (TLS), which is 5 x 10^{-9}. For the CAR Region the level was 12.3×10^{-9}, for the SAM Region 34.9×10^{-9}, and for the CAR/SAM Regions combined the level was 28.9×10^{-9}. In order to reduce risk values, corrective action is necessary to eliminate M and N type errors.

3.6.16 The Meeting agreed on the need to replace GREPECAS Conclusion 13/61 - *Measures to reduce operational errors in the ATC coordination loop between adjacent ACCs* in order to update it, keeping the programme for the prevention of ATC coordination loop errors between adjacent ATS units and additional measures associated with this prevention programme. Accordingly, the Meeting adopted the following conclusion:

CONCLUSION 15/36 MEASURES TO REDUCE OPERATIONAL ERRORS IN THE ATC COORDINATION LOOP BETWEEN ADJACENT ACCs

That taking into account the impact of operational errors in the ATC coordination loop between adjacent ACCs on air operations safety:

a) CAR/SAM States/Territories/International Organizations apply, on an urgent basis among other measures, the programme for the prevention of errors in the coordination loop between adjacent ACCs described in **Appendix F** to this part of the Report in order to reduce LHDs caused by errors in traffic coordination messages between ATC units to achieve an acceptable target level of safety;

b) CAR/SAM States/Territories/International Organizations gradually implement the interface for data exchange among ATC units (AIDC); and

c) ICAO coordinate, provides assistance, and conduct follow-up on the implementation of these corrective measures.

3.6.17 Likewise, the Meeting concluded that if M and N errors were not caused by RVSM operation but by common transferring ATC procedures from one ATC unit to another and by lack of coordination by the transferring ATC Unit, it would be convenient that the SASP analyze the methodology used for safety assessment. Accordingly, the Meeting formulated the following conclusion:

CONCLUSION 15/37 REVIEW OF THE METHODOLOGY USED FOR SAFETY ASSESSMENT

That ICAO review the methodology used for conducting post RVSM implementation safety assessments considering the fact that type M and N errors identified and used to perform this assessment may not be related to RVSM implementation.

3.6.18 The Meeting was informed that ICAO, in conjunction with CARSAMMA and the Scrutiny Group (GTE) has scheduled a new training course cycle on safety assessment, which will be held in the NACC Office from 1 to 5 December 2008 and in the SAM Office in March 2009.

Data on Technical Vertical Deviation

3.6.19 The Meeting considered that analysis of the methodology for the collection of data on technical vertical deviations to show that the Altimetry System Error (ASE) for RVSM-approved aircraft remained stable should be conducted. This task would only be achieved through the implementation of an aircraft altimetry system performance monitoring programme at least every two years, or at 1000-flight hour intervals for each aircraft, whichever occurs first.

3.6.20 A programme for the implementation of monitoring units to verify the aircraft altimetry system should consist of a system of independent monitoring units (AGHME) installed in strategic positions in regions of higher traffic flow density. The purpose would be to monitor the largest number of aircraft to verify the stability of the altimetry system error (ASE) and to check if the technical risk remained consistent with the agreed TLS of 2.5×10^{-9}.

3.6.21 It was noted that CARSAMMA and the GTE had planned a new series of courses/meetings in order to improve State participation in LHD analyses, which was expected to result in the enhancement of ATS safety levels in the CAR/SAM Regions.

Performance-Based Navigation (PBN)

3.6.22 The Meeting took note that Volume II of the new ICAO PBN Manual contained technical details on "Navigation Specifications" with standard harmonized airworthiness and operational requirements for several RNAV and RNP operations; navigation specifications for the use of APV procedures based on Baro-VNAV; as well as detailed training recommendations for pilots and controllers. Doc 8168 (PANS-OPS), Volume II, established the criteria for the development of Baro-VNAV procedures.

3.6.23 In view of the above, the Meeting approved the update of the CAR/SAM PBN Roadmap, with the following new paragraphs in Chapter 7 of the cited document:

7.3.3.1 Approach procedures for PBN should be implemented as approach procedures with vertical guidance (APV) using Baro-VNAV for runways either as the primary approach or as a back-up for precision approaches for all instrument runways, based on the RNP APCH or RNP AR APCH navigation specifications.

7.3.3.2 PBN implementation plan provisions for implementation of approach procedures with vertical guidance (APV) shall include all runway ends serving aircraft with a maximum certified take-off mass of 5700 kg or more.

Note: The PBN Manual, Volume II, Attachment A contains the specifications for using Baro-VNAV in conjunction with RNP APCH.

3.6.24 The Meeting noted that PBN implementation planning in the CAR/SAM Regions had been practically completed with the approval of the CAR/SAM PBN Roadmap. The main PBN task would be the optimization of ATS routes in the upper airspace and the harmonization of PBN implementation, taking into account the need to avoid multiple ATC procedures and operational approval processes.

3.6.25 The Meeting, pursuant to Resolution 36/23, and in order to provide guidance to the States/Territories/International Organizations, approved a national implementation plan model for en-route, terminal area and approach (TMAS) operations, which appears in **Appendix G** to this part of the Report. In view of the above, the Meeting adopted the following conclusion:

CONCLUSION 15/38 NATIONAL PBN IMPLEMENTATION PLANS

That in order to initiate PBN implementation and in accordance with Resolution 36/23, CAR/SAM States/Territories:

a) develop their PBN national implementation plans by December 2009, and present them to the corresponding Regional Offices;

b) consider using the PBN action plans models presented in **Appendix G** to this part of the Report as guidance material; and

c) designate a Point-of-Contact who will coordinate PBN implementation activities in each State/Territory.

3.6.26 The Meeting acknowledged the course offered by the United States on the Design of RNP AR Procedures, which supports PBN implementation. Interested States may contact the TSI Course Manager, Mr. Joseph Florio (joe.florio@tsi.jccbi.gov).

3.6.27 The Meeting took note of core information on the implementation of RNP10, 50 NM lateral separation and the associated operational policies in the WATRS airspace. The Meeting considered that this information was very useful as reference material in the preparation of national regulations for RNP 10 approval of aircraft and operators. The approval guidance material can be found on the FAA WATRS website:

(http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/enroute/oceanic/)

3.6.28 The benefits derived from this implementation included a 40% increase in WATRS airspace capacity, a reduction of ATC workload, expected fuel savings of U.S. $741 million (constant dollars) and an annual reduction of 161,800 metric tons of CO2 fuel emissions. In view of these benefits, the Meeting deemed it convenient to extend this type of implementation to the rest of the CAR/SAM Regions.

Strategic Lateral Offset Procedures (SLOP)

3.6.29 In accordance with State letter AN1311 1.6-04185, *Revised guidelines on the use of strategic lateral offsets, the* Meeting recognized that the Strategic Lateral Offset Procedures (SLOP)

contained in ICAO Doc 4444 could improve safety in the CAR/SAM Regions and agreed to incorporate them into the Regional Supplementary Procedures (Doc 7030), for application in the airspace not covered by ATS surveillance systems (*i.e.*, radar, ADS-B, etc.). To this end, the Meeting adopted the following conclusion:

CONCLUSION 15/39 ADOPTION OF STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)

That, recognizing that Strategic Lateral Offset Procedures (SLOP) may provide safety enhancements in the CAR/SAM Regions, ICAO take the necessary measures to initiate an amendment to Doc 7030, based on the PANS ATM (Doc 4444), for the application of SLOP in areas where route separation is at least 30 NM and no ATS surveillance system coverage exists (i.e., radar, ADS-B, etc).

Air Traffic Flow Management (ATFM)

3.6.30 The Meeting noted that there was a need for common methodologies for the establishment of aerodrome acceptance rate(s) (AAR); traffic management initiatives and procedures to balance demand and capacity; and methodologies to assess the effectiveness of air traffic flow management (ATFM) measures.

3.6.31 Upon reviewing the information provided, the Meeting recognized the pressing need to obtain concrete results in order to develop a common model for the CAR/SAM Regions to determine AAR, as well as a method to determine ATC sector capacity, and to provide guidance material for consistent application by CAR/SAM States/Territories/International Organizations.

ATM Automation

3.6.32 Among the most relevant operational problems of ATM automation identified by the Meeting, which needed to be addressed by the States/Territories was the duplication of flight plans (FPL) and errors in the transmission of FPL data. Taking into account the impact that operational deviations had on the coordination of flight plan data between adjacent ACCs, the Meeting considered that CAR/SAM States, Territories and International Organizations, based on their individual requirements, should:

a) report and document duplicate FPLs and errors in the transmission of FPL data to the adjacent facility and/or operator, as appropriate, within 24 hours of becoming aware of such an occurrence;

b) apply appropriate Safety Management System (SMS) measures to investigate, track and apply appropriate mitigation measures;

c) coordinate results, as appropriate, of the investigation and/or mitigations with the adjacent ACC/operator;

d) forward tracking information and corrective actions to the ICAO Regional Offices for processing and follow-up; and

e) that ICAO should act as a focal point for data collection and oversee the mitigation activities within the CAR/SAM Regions.

3.6.33 The Meeting noted that several States/Territories/International Organizations were exchanging surveillance/radar data by virtue of bilateral agreements, which improved and standardized traffic in the Region, and would offer greater availability of radar and non-radar surveillance data sources and improve accuracy, availability and safety in the provision of ATS services.

3.6.34 In view of the above and taking into account the regional strategy, the Meeting concluded that several States/Territories/International Organizations could achieve ATM automation in Stages I, II, and III, and thus urged them to include the necessary activities in their respective action plans in keeping with the regional strategy approved by GREPECAS.

Issues concerning the organization of the ATM Committee

3.6.35 The Meeting noted that in accordance with GREPECAS Conclusion 14/51, the performance objectives were adopted as the ATM Committee work programme in line with Decision 15/34 – *New CNS/ATM Subgroup*.

3.6.36 The reorganization of the ATM work programme is consistent with the *Global Air Navigation Plan* (Doc 9750) and the ICAO vision as established in the *Global Air Traffic Management Operational Concept* (Doc 9854). Tasks of the ATM performance objectives will facilitate quantifying the cost/benefit relationship and therefore ensure the success of their implementation. The progress and achievements of all related tasks included in the performance objectives will be reviewed and measured so as to ensure timely reports on the ATM regional work for GREPECAS, the ANC and ICAO Council.

ATM Community expectations

3.6.37 The Meeting recognized the expectations of the ATM community and that the performance-based approach could be used to better meet these expectations and improve the performance of service providers, according to the ICAO *ATM Requirements Manual* (Doc 9882). Expectations regarding flight operations, airspace/airport use and air navigation services have been identified as: safety, security, environmental impact, cost effectiveness, capacity, flight efficiency, flexibility, predictability, access and equity, participation and collaboration, and interoperability.

Measuring performance

3.6.38 The Meeting recognized that the performance-based approach required that when designing, planning, implementing and operating a global air navigation system, a performance measurement analysis should also be included in keeping with the guidelines contained in the ICAO *Global Air Navigation System Performance Manual* (Doc 9883). When following-up an action plan, performance measurement should focus on short and medium-term benefits derived from the

improvements to air navigation systems and the environment through the implementation of work programmes, while avoiding costly data collection and analysis processes.

3.6.39 The Meeting deemed it advisable for stakeholders to participate in order to obtain specific results related to economic and management performance data sharing. Each implementation programme should include performance measurement in one of the following areas: safety, quality of service (such as capacity, delays and flight efficiency), productivity and cost-effectiveness.

3.6.40 To this end, simple and relevant indicators should be used to measure performance implementation. An example would be RVSM implementation, which reduced fuel consumption with economic benefits and also resulted in the reduction of CO2 emissions on a regional and global basis.

3.6.41 With respect to the amendment to Doc 4444 – PANS/ATM on Aeronautical Phraseology in Spanish, which will become effective in November 2009, the Meeting took note of the offer made by IFALPA to assist the States/Territories/International Organizations that so require with the implementation of this amendment.

CNS Committee

Report of the Sixth Meeting of the CNS Committee

Development of communication systems

3.6.42 The Meeting took note of the pending activities for the implementation of the MEVA II/REDDIG interconnection with respect to focal points, REDDIG management, the MEVA II service provider, acceptance of the MoU for the MEVA II/REDDIG interconnection; satellite contingency plan, and the update of the respective action plan.

3.6.43 Information was also provided on the update of the CAR/SAM Regional Plan for the Aeronautical Mobile Service (AMS) and the Aeronautical Mobile Satellite Service (AMSS) contained in Table CNS 2A of the *CAR/SAM Regional Air Navigation Plan*, Doc 8733, Volume II (FASID) circulated to the States as an amendment through the ICAO Regional Offices.

3.6.44 The Meeting also took note of the action taken and the considerations made in the CAR and SAM Regions, respectively, regarding the implementation of air-ground data links. In this regard, it was noted that the new versions and models of AMS VHF radio equipment are capable of data transmission (generally in VDL Mode 2), that some CAR/SAM States had acquired these new VHF radio equipment versions that were already operating in the Regions, and that some aircraft were equipped with radios capable of data transmission (VDL 2). In this respect, it was noted that studies could be undertaken to conduct VDL data transmission trials. Accordingly, it was deemed advisable that ICAO hold a seminar to share experiences on the implementation of data transmission in other regions, the functionalities or applications implemented through those links, the SARPs already in place and those foreseen by ICAO in this area, as well as information on future air-ground data communication systems. In this respect, the Meeting formulated the following conclusion:

CONCLUSION 15/40 SEMINAR/WORKSHOP ON THE IMPLEMENTATION OF AIR-GROUND DATA LINKS AND THEIR APPLICATIONS

In order to support the study of a plan to conduct air-ground data links transmission trials and the functionalities or applications implemented through such links, ICAO is urged to organize and conduct a seminar/workshop on this topic the last quarter of 2009.

Follow-up on ATN implementation and its applications

3.6.45 A review was made of the preliminary ATN router plan (Table CNS 1Ba) for the CAR and SAM Regions as contained in **Appendices H** and **I,** respectively**,** to this part of the Report. Likewise, the ATN ground-ground application implementation plans contained in FASID Table CNS1Bb and shown in **Appendices J** and **K** were reviewed and updated. It was noted that AMHS would be implemented in most CAR/SAM States and Territories by 2015.

3.6.46 Regarding AIDC application, it was noted that an implementation date had not yet been defined. Also, note was taken that table CNS 1Bb showed the use of protocol IP as a standard for ATN ground-ground applications, and that the IP protocol, version 4 (IPv4), was being used for AMHS systems implemented in the CAR/SAM Regions, in keeping with the preliminary approach for IP implementation in the CAR/SAM Regions (initial use of IPv4 to expedite implementation of the ATS/MHS service in the CAR/SAM Regions, and of protocol IPv6 for inter-regional connectivity). An IPv4 and IPv6 transition phase was also considered.

3.6.47 A review was made of the CAR/SAM IP addressing plan developed by the CNS Committee, which was based on an IPv4 private address space, taking into account the limited availability of IPv4 public addresses and the potential IPv6 transition plan (**Appendix L** to this part of the Report). The aforementioned plan would be sent to ICAO HQ for review. Likewise, the CAR/SAM preliminary AMHS addressing plan was reviewed as shown in **Appendix M,** and note was taken of the importance to establish an entity to manage the AMHS addressing scheme and coordinate this work with other ICAO Regions.

Communication considerations to foster the migration for the exchange of meteorological messages in BUFR code

3.6.48 It was noted that the ICAO Air Navigation Commission, at the fourth meeting of its 176th Session, had approved the suspension of the migration of BUFR code until such time that the WMO Panel completed the studies on the use of XML for OPMET exchange. Consequently, the ATN Task Force and the COM/MET Group of the MET Subgroup should suspend their studies of communication aspects for the migration to the exchange of meteorological messages in BUFR code.

3.6.49 It was also noted that the WMO Panel had not yet begun the study of XML for the transmission of OPMET messages (METAR/SPECI and TAF) and that these activities were expected to be completed by 2009. In this respect, it was considered that as part of the studies on the use of XML for OPMET message transmission, the WMO Panel, together with ICAO, analyze possible impacts on the

systems that were replacing AFTN, such as the AMHS system, which was increasingly being implemented in the CAR/SAM Regions and in other regions of the world. In this regard, the Meeting considered that ICAO should assign high priority to participation in this important topic.

Development of navigation systems

Proposal of amendment to the Regional Air Navigation Plan - FASID Table CNS/3

3.6.50 Considering that the existing Regional Air Navigation Plan did not contemplate the planning of airborne GNSS augmentation systems, and taking into account the need for short and medium-term plans for the use of airborne augmentation systems to meet PBN requirements, the Meeting agreed to a proposal for amendment to Table CNS 3 of the CAR/SAM Air Navigation Plan consisting of the addition of a new column entitled "ABAS" under GNSS requirements. In this respect, the following conclusion was formulated:

CONCLUSION 15/41 AMENDMENT TO THE REGIONAL AIR NAVIGATION PLAN – TABLE CNS/3 OF FASID

That ICAO consider amending the format of the Regional Air Navigation Plan FASID Table CNS 3 by adding a new column under GNSS requirements to reflect the planning of ABAS requirements as shown in the **Appendix N** to this part of the Report.

Follow-up on SBAS and GBAS augmentation system planning/implementation activities in the CAR/SAM Regions

3.6.51 The Meeting considered that currently available ionospheric data should be included in the studies conducted under project RLA/03/902 and that States that had GNSS receivers, such as the members of project RLA/00/009, should report the operational condition of such receivers, as well as other available GNSS receivers capable of collecting L1 and L2 data every second, so that Project RLA/03/902 could analyze the feasibility of using such data in its studies. Accordingly, the Meeting formulated the following conclusion:

CONCLUSION 15/42 AVAILABILITY OF GNSS RECEIVERS FOR PROJECT RLA/03/902 IONOSPHERIC ANALYSES AND STUDIES

In order to support the ionospheric analyses and studies being conducted by project RLA/03/902, CAR/SAM States/Territories/International Organizations are urged to inform ICAO, through their respective Regional Offices **no later than 15 July 2009,** about the existence and availability of GNSS receivers with an L1 and L2 data collection capability per second**,** reporting their geographic location and the type of equipment.

3.6.52 Note was taken of the systematic and operational improvements introduced to the United States SBAS system (WAAS). In this regard, the Meeting considered that with the increased use of SBAS, it was essential for operational requirements and procedure design criteria to be harmonized globally. Information was provided on the results of Phase II of project RLA/03/902 - SACCSA and of the comments made by members of the project concerning the importance of having more States participate in Phase III of the project. With the purpose to adopt a decision to continue with Phase III of Project RLA/03/902, the Meeting agreed that ICAO, through its Regional Offices, circulate a communication requesting States/Territories/International Organizations to identify whether or not they are interested in participating in Phase III of the project and contributing to its corresponding funding requirements. It was also agreed that responses should be received no later than 31 December 2008, and in this sense the following conclusion was formulated:

CONCLUSION 15/43 SUPPORT FOR PROJECT RLA/03/902-SACCSA

Bearing in mind:

- that Phase III of SACCSA could provide definitive elements for decision-making by the CAR/SAM Regions with regard to the implementation of SBAS;

- that the proposed ionospheric studies are of considerable importance for gaining knowledge and characterizing actual behaviour for consequent implementation/planning of the GNSS solution; and

- the importance of having CAR/SAM States willing to participate in Phase III of RLA/03/902 SACCSA for the efficient completion of the project;

ICAO is requested to circulate, as soon as possible through its Regional Offices, a letter to States/Territories/International Organizations, asking them to identify by 31 December 2008, whether or not they are interested in participating in Phase III of project RLA/03/902 - SACCSA in order to determine those interested in conducting Phase III and making a decision in this regard.

3.6.53 In order to further develop the CAR/SAM PBN Roadmap and to provide a guide for States and users on the development of their GNSS plans in the short, medium, and long-terms, the Meeting agreed on the need to plan the implementation of RAIM GPS and Baro-VNAV GPS in the CAR/SAM Regions. Accordingly, the Meeting formulated the following conclusion:

CONCLUSION 15/44 USE OF GNSS IN THE SHORT-TERM

In order to comply with the implementation of the CAR/SAM PBN Roadmap, States/Territories/International Organizations are urged to complete the development and approval of GPS-based NPA operations, establishing regulations and procedures (NOTAM, AIC, etc.) for the use of RAIM GPS and Baro-VNAV GPS in the short-term.

Regional plan for the deactivation of NDB systems

3.6.54 Note was taken of the activities conducted by ICAO in order to obtain plans for the deactivation of NDB stations by the States/Territories/International Organizations, and that the information provided by some States/Territories/International Organizations was not complete. Therefore, in order to complete the regional NDB station phase-out plan, all States should review and complete the required information. Accordingly, the following conclusion was formulated:

CONCLUSION 15/45 REVIEW OF THE PLAN FOR THE PHASE-OUT OF NDB STATIONS

That States/Territories /International Organizations review and complete the information contained in the Regional Plan for the Phase-out of NDB Stations in the CAR and SAM Regions that appears in **Appendix O** to this part of the Report and send missing information to the respective ICAO Regional Offices before **15 July 2009.**

Development of surveillance systems

Review of the regional strategy for the implementation of CAR/SAM surveillance systems

Follow-up on planning/implementation/trials of surveillance systems (ADS-C, ADS-B, radar Mode S, multilateration, etc.)

3.6.55 The Meeting was informed of the preliminary document on the regional unified surveillance strategy developed by the CNS Committee, which appears in **Appendix P** to this part of the Report. The Meeting was also informed about the work of the Surveillance Task Force of the CNS Committee regarding ADS-B trials. **Appendices Q** and **R,** respectively, contain information to be taken into account by the States/Territories/International Organizations when conducting ADS-B trials on their own or jointly with the FAA. The Meeting also took note of considerations to be taken into account for a standard registry of aircraft equipped with Mode S transponders, as shown in **Appendix S** to this part of the Report.

Results of the ITU 2007 World Radio Communication Conference (WRC-2007) and the initial position of ICAO for ITU WRC-2011

3.6.56 The Meeting was apprised of the results of the WRC-2007 meeting, as well as of the preliminary position of ICAO for WRC-2011. The Meeting considered that CAR/SAM States/Territories and International Organizations should support and follow-up on the work of ICAO in the preparation and update of its position for WRC-11. Accordingly, the Meeting formulated the following conclusion:

CONCLUSION 15/46 CAR/SAM REGIONAL ACTION FOR THE PREPARATION AND SUPPORT OF THE ICAO POSITION FOR WRC-11

That CAR/SAM States and International Organizations, in preparation and support of the ICAO position for the ITU World Radio Communication Conference – 2011 (WRC-11):

a) support and follow-up on the work of ICAO to prepare and update its position for WRC-11;

b) appoint a focal point or a contact person to serve as a liaison with ICAO and with the national radio frequency spectrum management authority to coordinate matters concerning WRC-11;

c) participate actively in the Organization of American States (OAS) CITEL meetings in preparation for WRC-11;

d) participate actively in any meetings and seminars convened by ICAO to explain and analyze the position of this organization for WRC-11;

e) participate actively in WRC-11 in support of the ICAO position; and

f) recommend and implement other appropriate measures.

APPENDIX A

EXAMPLE OF DATA MANAGEMENT NOTICE (DM)

NOXX10 KWBC 221925
DATA MGT MESSAGE 05-08.13

TO AWIPS/NOAAPORT USERS.. FAMILY OF SERVICES/FOS/SUBSCRIBERS...
EMERGENCY MANAGERS WEATHER INFORMATION NETWORK /EMWIN/
NATIONAL WEATHER SERVICE /NWS/ CUSTOMERS... WAFS USERS...
GTS USERS... NWS FAX CHART USERS

FROM RTH WASHINGTON DATA MANAGEMENT

CHANGE NOTICE NO 0007
EFFECTIVE DATE AUGUST 31 2008

[0007] ON THE ABOVE EFFECTIVE DATE THE FOLLOWING COLLECTIVES WILL BE ADDED TO THE ISCS DATASTREAM.

PATRICK GILLIS [301] 713-1743 EXTENSION 104 IS THE COGNIZANT TECHNICAL INDIVIDUAL. ROBERT GILLESPIE [301] 713-9478 EXTENSION 140 IS THE DRG FOCAL POINT FOR THIS ITEM.

ISCS/WAFS BROADCAST WILL CONTAIN ONLY UNALTERED/UNEDITED AVIATION WEATHER BULLETINS AS THEY WERE RECEIVED FROM THE ORIGINATING ICAO AERODROME, AFTER 31 AUGUST 2008. THE EDITED COLLECTIVES CONSTRUCTED FROM BULLETINS RECEIVED AT WAFSC-WASHINGTON FROM INTERNATIONAL AERODROME SOURCES WILL CONTINUE TO BE AVAILABLE ON BOTH THE GLOBAL TELECOMMUNICATION SYSTEM (GTS) AND THE NWS PUBLIC FTP SERVER.

THE FOLLOWING PRODUCT(S) WILL BE DELETED FROM THE ISCS DATASTREAM:

Note the listing of all the WMO headers that are being changed have not been reproduced in this example for the purpose of conserving space in reproduction of the paper.

APPENDIX B

DETAILED IMPLEMENTATION PLAN FOR THE TRANSITION FROM GRIB 1 TO GRIB 2 CODE FORM WITHIN THE WAFS

GRIB 2 MIGRATION MILESTONES	WAFSOPSG Meeting Schedule	ICAO Annex 3 Amendment Cycle
February 2008: • WAFCs update implementation plan • WAFSOPSG/4 endorses implementation plan	WAFSOPSG/4	
April 2008 to September 2009: • WAFCs develop and test WAFS forecasts in the GRIB 2 code form, encompassing higher-resolution data, as well as gridded icing, turbulence and cumulonimbus cloud forecasts.		
September 2009: • GRIB 2 available on ISCS and SADIS FTP services, in parallel with GRIB 1 • Workshop on the new gridded forecasts of cumulonimbus clouds, icing and turbulence	WAFSOPSG/5	
September 2009 to November 2011: • WAFS workstation vendors develop GRIB 2 decoders and software to enable the visualisation of WAFS upper-air forecasts (including higher-resolution fields and gridded icing, turbulence and cumulonimbus cloud forecasts).		
November 2010: • Applicability of enabling clauses in Annex 3 for the use of gridded WAFS forecasts for icing, turbulence and cumulonimbus clouds.		Amendment 75
February 2011: • Confirm date for the cessation of satellite broadcast of forecasts in the GRIB 1 code form	WAFSOPSG/6	
November 2011 to November 2013: • WAFS end-user workstations upgraded to accept GRIB 2 code form.	(September 2012: WAFSOPSG/7)	
November 2013: • Cessation of WAFS forecasts in the GRIB 1 code form		(Amendment 76)

APPENDIX C

Part VI

METEOROLOGY (MET)

FASID

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EXCHANGE OF MET INFORMATION FOR OPERATIONS
(FASID Tables MET 2A and MET 2B)

4. ~~Reports in the METAR/SPECI code forms and aerodrome forecasts in the TAF code form required in ISCS and SADIS are shown in FASID Table MET 2A.~~The requirements for availability of OPMET information METAR, SPECI and TAF on a global basis through the AFS satellite distribution system (the ISCS and SADIS Broadcast and the associated internet based distribution system (SADIS FTP and ISCS…) are included in FASID Table MET 2A. This table contains the aerodromes included in the CAR/SAM FASID Table AOP and those non-AOP aerodromes for which the States concerned have agreed to make available the OPMET information via the satellite distribution system on a regular basis.

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Table MET 1A - Tableau MET 1A - Tabla MET 1A

Aerodrome where service is required Aérodrome où le service doit être assuré Aeródromo donde se requiere el servicio			Responsible MET Office Centre MET responsable Oficina MET responsable		Forecasts to be provided Prévisions à fournir Pronósticos a suministrar		
Name Nom Nombre	ICAO loc. ind. Ind. d'empl OACI Ind. lugar OACI.	Use Vocation Uso	Name Nom Nombre	ICAO loc. ind. Ind. d'empl. OACI Ind. lugar OACI	Trend Tendance Tendencia	TAF 18h	TAF 24h
1	2	3	4	5	6	7	8
…							
BRAZIL							
BELEM/Val de Caes	SBBE	RS	MANAUS/CINDACTA IV, AM~~BELEM/Val de Caes~~	SBAZ~~SBBE~~			X
BELO HORIZONTE/Tancredo Neves	SBCF	RS	RIO DE JANEIRO/Antonio Carlos Jobim Intl	SBGL			X
BOA VISTA/Boa Vista Intl	SBBV	RS	MANAUS/ CINDACTA IV, AM~~Eduardo Gomes~~	SBAZ~~SBEG~~			X
BRASILIA/Pres. Juscelino Kubitschek, DF	SBBR	RS	BRASILIA/CINDACTA I, DF~~Brasília Intl~~	SBBS~~SBBR~~			X
CAMPINAS/Viracopos	SBKP	RS	SAO PAULO/Guarulhos Intl	SBGR			X
CAMPO GRANDE/Campo Grande Intl	SBCG	RS	PORTO ALEGRE/Salgado Filho	SBPA			X
CORUMBA/Corumba Intl	SBCR	RS	PORTO ALEGRE/Salgado Filho	SBPA			X
CRUZEIRO DO SUL/Cruzeiro do Sul Inl	SBCZ	RS	MANAUS/CINDACTA IV, AM~~Eduardo Gomes~~	SBAZ~~SBEG~~			X
CUIABA/Marechal Rondon	SBCY	RS	BRASILIA/CINDACTA I~~Brasília Intl~~	SBBS~~SBBR~~			X
CURITIBA/Afonso Pena	SBCT	RS	PORTO ALEGRE/Salgado Filho	SBPA			X
FLORIANÓPOLIS/Hercílio Luz Intl	SBFL	RS	PORTO ALEGRE/Salgado Filho	SBPA			X
FORTALEZA/Pinto Martins	SBFZ	RS	RECIFE/CINDACTA III, PE~~Guararapes~~	SBRE~~SBRF~~			X
FOZ DO IGUAÇU/Cataratas	SBFI	RS	PORTO ALEGRE/Salgado Filho	SBPA			X
MACAPA/Macapa Intl	SBMQ	RS	MANAUS/CINDACTA IV, AM~~BELEM/Val de Caes~~	SBAZ~~SBBE~~			X
MACEIO/Zumbi dos Palmares Intl.	SBMO	RS	RECIFE/CINDACTA III, PE~~Guararapes~~	SBRE~~SBRF~~			X
MANAUS/Eduardo Gomes	SBEG	RS	MANAUS/CINDACTA IV, AM~~Eduardo Gomes~~	SBAZ~~SBEG~~			X
NATAL/Augusto Severo	SBNT	AS	RECIFE/CINDACTA IV~~Guararapes~~ – CINDACTA III~~GILBERTO FREYRE,~~ PE	SBRE~~SBRF~~			X
PONTA PORA/Ponta Pora Intl	SBPP	RS	PORTO ALEGRE/Salgado Filho	SBPA			X
PORTO ALEGRE/Salgado Filho	SBPA	RS	PORTO ALEGRE/Salgado Filho	SBPA			X
RECIFE/Guararapes	SBRF	RS	RECIFE/CINDACTA III~~Guararapes~~	SBRE~~SBRF~~			X
RIO DE JANEIRO/Galeao, Antonio Carlos Jobim Intl	SBGL	RS	RIO DE JANEIRO/Galeao, Antonio Carlos Jobim Intl	SBGL			X

Aerodrome where service is required Aérodrome où le service doit être assuré Aeródromo donde se requiere el servicio			Responsible MET Office Centre MET responsable Oficina MET responsable		Forecasts to be provided Prévisions à fournir Pronósticos a suministrar		
Name Nom Nombre	ICAO loc. ind. Ind. d'empl OACI Ind. lugar OACI.	Use Vocation Uso	Name Nom Nombre	ICAO loc. ind. Ind. d'empl. OACI Ind. lugar OACI	Trend Tendance Tendencia	TAF 18h	TAF 24h
1	2	3	4	5	6	7	8
SALVADOR/Deputado Luis Eduardo Magalhaes	SBSV	RS	RECIFE/CINDACTA IIIGuararapes	SBRESBRF			X
SANTAREM/Santarém Intl	SBSN	AS	MANAUS/CINDACTA IV, AMBELEM/Val de Caes	SBAZSBBE			X
SAO LUÍS/Marechal Cunha Machado	SBSL	AS	MANAUS/CINDACTA IV, AMBELEM-Val de Caes	SBAZSBBE			X
SAO PAULO/Guarulhos Intl	SBGR	RS	SAO PAULO/Guarulhos Intl	SBGR			X
TABATINGA/Tabatinga Intl	SBTT	RS	MANAUS/CINDACTA IV, AMEduardo Gomes	SBAZSBEG			X
URUGUAIANA/Rubem Berta	SBUG	RS	PORTO ALEGRE/Salgado Filho	SBPA			X
…							
CHILE							
ANTOFAGASTA/Cerro Moreno	SCFA	AS	ANTOFAGASTA/Cerro Moreno	SCFA	X		X
ARICA/Chacalluta	SCAR	RS	ANTOFAGASTA/Cerro Moreno	SCARSCFA			X
CONCEPCION/Carriel Sur	SCIE	RS	SANTIAGO/Arturo Merino Benítez	SCIESCEL			X
IQUIQUE/Gral Diego Aracena Intl.	SCDA	RS	ANTOFAGASTA/Cerro Moreno	SCDASCFA			X
PUERTO MONTT/El Tepual	SCTE	RS	PUERTO MONTT/El Tepual	SCTE	X		X
PUNTA ARENAS/Pdte. C. Ibañez del Campo	SCCI	AS	PUNTA ARENAS/Pdte. C. Ibañez del Campo	SCCI	X		X
SANTIAGO/Arturo Merino Benitez	SCEL	RS	SANTIAGO/Arturo Merino Benitez	SCEL	X		X
COLOMBIA							
BOGOTA/Eldorado	SKBO	RS	BOGOTA/Eldorado	SKBO	X		X
BARRANQUILLA/Ernesto Cortissoz	SKBQ	RS	BARRANQUILLA/Ernesto Cortissoz	SKBQ	X		X
CALI/Alfonso Bonilla Aragón	SKCL	RS	CALI/Alfonso Bonilla Aragón	SKCL	X		X
CARTAGENA/Rafael Núñez	SKCG	RS	CARTAGENA/Rafael Núñez	SKCG			X
CUCUTA/Camilo Daza	SKCC	RNS&AS	CUCUTA/Camilo Daza	SKCC			X
LETICIA/Alfredo Vásquez Cobo	SKLT	RNS&AS	SANTA FE DE BOGOTA/Eldorado	SKBO			X
RIONEGRO/José María Córdoba	SKRG	RS	RIONEGRO/José María Córdoba	SKRG	X		X
SAN ANDRES I./Sesquicentenario	SKSP	RS	SAN ANDRES I./Sesquicentenario	SKSP			X
…							

Table MET 1B — Tabla MET 1B

METEOROLOGICAL WATCH OFFICES
OFICINAS DE VIGILANCIA METEOROLÓGICA

MWO location Emplacement du MWO Lugar de la MWO	ICAO loc.ind. Ind. d'empl. OACI Ind. lugar OACI	Area served/Région desservie/Zona atendida		Remarks Remarques Observaciones
		Name Nom Nombre	ICAO loc. ind. Ind. d'empl. OACI Ind. lugar OACI	
1	2	3	4	5
.....				
CHILE				
ANTOFAGASTA/Cerro Moreno	SCFA	Antofagasta FIR/SRR	SCFZ	During the night SCEL assumes functions of Meteorological Watch Office for the FIR / En horario nocturne SCEL assume las funciones de oficina de vigilancia meteorological para la FIR.
SANTIAGO/Arturo Merino Benítez	SCEL			
PUERTO MONTT/El Tepual	SCTE	Puerto Montt FIR/SRR	SCTZ	
PUNTA ARENAS/Pdte. C. Ibañez del Campo	SCCI	Punta Arenas FIR/SRR	SCCZ	
SANTIAGO/Arturo Merino Benitez	SCEL	Santiago FIR/SRR	SCEZ	Assumes functions of Meteorological watch in absence of another WMO / Asume funciones dee vigilancia en ausencia de otra MWO.
.....				
UNITED STATES				
Kansas City Aviation Weather Center	KKCI	Houston Oceanic FIR Miami Oceanic FIR/SRR ~~Nassau FIR~~ San Juan FIR/SRR	KZHU KZMA ~~MYNA~~ TJZS	
.....				

Table MET 2A — Tabla MET 2A

~~Availability of~~ OPMET information (METAR, SPECI and TAF) required in ISCS and SADIS

~~www.icao.int/anb/sadisopsg/sug/sug_annex1.pdf~~

Note: FASID Table MET 2A is a global table showing the current requirements for OPMET information (METAR/SPECI and TAF) from all ICAO Regions necessary for the international air navigation. FASID Table MET2A is available on: www.icao.int/anb/sadisopsg/sug/sug_annex1.pdf and is regularly updated through the ICAO Regional Offices based on identified user agreements and in consultation with the States concerned.

~~Disponibilidad de i~~Información OPMET (METAR, SPECI Y TAF) requerida en el ISCS y en el SADIS

Nota: La Tabla MET 2A del FASID es una tabla global que muestra los requerimientos actuales de información OPMET (METAR/SPECI y TAF) de todas las Regiones de la OACI necesarios para la navegación aérea internacional. La Tabla MET 2A del FASID está disponible en: www.icao.int/anb/sadisopsg/sug/sug_annex1.pdf y es actualizada regularmente a través de las Oficinas Regionales de la OACI basadas en acuerdos de los usuarios identificados y en consulta con los Estados concernientes.

Table MET 2A — Tabla MET 2A

Aerodrome where service is to be provided			OPMET to be provided			
Listed in AOP Tables	Not Listed in AOP Tables	ICAO Location	SA/SP	FC	FT	Remark
1	2	3	4	5	6	7
.....						
Bolivia						
	COBIJA	SLCO	Y		Y	Only in the daytime
COCHABAMA		SLCB	Y		Y	
	EL TROMPILLO	SLET	Y		Y	Only in the daytime
LA PAZ		SLLP	Y		Y	
	POTOSI	SLPO	Y			Only in the daytime
	PUERTO SUAREZ	SLPS	Y		Y	Only in the daytime
	SUCRE	SLSU	Y		Y	Only in the daytime
TARIJA		SLTJ	Y		Y	Only in the daytime
TRINIDAD		SLTR	Y		Y	Only in the daytime
VIRU VIRU		SLVR	Y		Y	~~Only in the daytime~~
Peru						
	ANDAHUAYLAS	SPHY	Y		Y	
AREQUIPA		SPQU	Y		Y	
	AYACUCHO/CORONEL FAP ALFREDO MENDIVIL DUARTE	SPHO	Y		Y	
	CAJAMARCA/MAYOR GENERAL FAP ARMANDO REVOREDO IGLEXIAS	SPJR	Y		Y	
	~~*CELENDIN*~~	~~SPLD~~	~~Y~~		~~Y~~	
CHICLAYO/CAP. JOSE ABELARDO QUIÑONES GONZALES		SPHI	Y		Y	
CUSCO/VELAZCO ASTETE		SPZO	Y		Y	
	ILO	SPLO	Y		Y	
IQUITOS/CORONEL FAP FRANCISCO SECADA VIGNETTA		SPQT	Y		Y	
	JUANJUI	SPJI	Y	~~Y~~		
	JULIACA	SPJL	Y		Y	
LIMA-CALLAO/INTL JORGE CHAVEZ		SPIM	Y		Y	
PISCO		SPSO	Y		Y	
	PTO. MALDONADO/PADRE ALDAMIZ	SPTU	Y			
	PUCALLPA/DAVID ABENSUR R.	SPCL	Y		Y	
TACNA/CORONEL FAP CARLOS CIRIANI SANTA ROSA		SPTN	Y		Y	
	TALARA/CAPITAN MONTES	SPYL	Y		Y	
	TARAPOTO/CDTE. GUILLERMO DEL CASTILLO PAREDES	SPST	Y		Y	
	TINGO MARIA	SPGM	Y	~~Y~~		
TRUJILLO/CAPITAN CARLOS MARTINEZ DE PINILOS		SPRU	Y		Y	
	TUMBES/PEDRO CANGA	SPME	Y			
	YURIMAGUAS/MOISES BENZAQUEN RENGIFO	SPMS	Y	~~Y~~		
.....						

MET **VI-MET 2B-2**

TO BE AVAILABLE IN/ESTARÁN DISPONIBLES EN

	ICAO Loc. Ind./Ind. Lugar OACI	Anguilla I. (U.K.)	Antigua and Barbuda	Argentina	Aruba (Netherlands)	Bahamas	Barbados	Belize	Bolivia	Brazil	Cayman Is. (U.K.)	Chile	Colombia	Costa Rica	Cuba	Dominica	Dominican Republic	Ecuador	El Salvador	French Antilles (France)	French Guiana (France)	Grenada	Guatemala	Guyana	Haiti	Honduras	Jamaica	Mexico	Montserrat I. (U.K.)	Netherland Antilles (Netherlands)	Nicaragua	Panama	Paraguay	Peru	Puerto Rico (U.S.)	Saint Kitts and Nevis	Saint Lucia	S. Vincent and the Grenadines	Suriname	Trinidad and Tobago	Turks and Caicos Islands (U.K.)	Uruguay	Venezuela	Virgin Islands (U.K.)	Virgin Islands (U.S.)	Brasilia/Washington	OPMET Data Banks	SADIS and ISCS Uplink Stations/ Estaciones de Enlace Ascendente ISCS y SADIS
FROM/DE																																														
CAR																																														
…..																																														
CUBA																																														
Camaguey/Ignacio Agramonte Intl	MUCM			T			T							F									T			F	T						T										F	F
Caryo Coco ~~Intl.~~ /Jardines del Rey Intl	*MUCC*																																												*F*	*F*
Cayo Largo del Sur/Vilo Acuña Intl	MUCL																																												F	F
Ciego de Avila	MUCA			T			T							F									T			F	T						T										F	F
~~*Guantánamo US Naval Base*~~	~~*MUGT*~~																																											~~*F*~~	~~*F*~~
La Habana/José Martí Intl	MUHA			T		F	T		F	T		T	T	F			F	T						T			F	T		F	F	F		T	F							F		F	F
Holguin/Frank País Intl	MUHG			T		F	T		F	T		T	T	F			F	T						T			F	T		F	F	F		T	F							F		F	F
Santiago de Cuba/Antonio Maceo Intl	MUCU												T				F										F																F		F	F
Varadero/Juan Gualberto Gómez Intl	MUVR			T									T				F														F		T								F		F	F
…..																																														
MEXICO																																														
Acapulco	MMAA			T		T				T			T	F	F			T	F				F			T						F		T									F	F
Aguascalientes	*MMAS*																																												*F*	*F*
Bahias de Huatulco	MMBT																																												F		F
Campeche	MMCP			T											F		F																											F	F
Cancun	MMUN					F							T		F		F									F	T					F		T									F	F
Chetumal	MMCM																																												F	F
Chihuahua	MMCU																																												F	F
Ciudad Acuña	MMMC																																												F	F
Ciudad Del Carmen	*MMCE*																																												*F*	*F*
Ciudad Juarez	MMCS																																												F	F
Ciudad Obregón	*MMCN*																																												*F*	*F*
Ciudad Victoria	*MMCV*																																												*F*	*F*
Colima	*MMIA*																																												*F*	*F*
Cozumel	MMCZ					F	T	F			F			F	F				F				F			T					F	F		T	T								F	F
Culiacan	MMCL																	T																											F		F
Cuernavaca	*MMCB*																																													*F*	
Durango	MMDO																																													F	F
Guadalajara	MMGL			T		F				T			T		F			T																T										F	F
Guaymas	MMGM																																													F	F
Hermosillo	MMHO																																													F	F
Ixtapa-Zihuatanejo	MMZH																																														F	F
Jalapa	*MMJA*																																													*F*	
La Paz	MMLP																		F																											F	F

TO BE AVAILABLE IN/ESTARÁN DISPONIBLES EN

	ICAO Loc. Ind./Ind. Lugar OACI	Anguilla I. (U.K.)	Antigua and Barbuda	Argentina	Aruba (Netherlands)	Bahamas	Barbados	Belize	Bolivia	Brazil	Cayman Is. (U.K.)	Chile	Colombia	Costa Rica	Cuba	Dominica	Dominican Republic	Ecuador	El Salvador	French Antilles (France)	French Guiana (France)	Grenada	Guatemala	Guyana	Haití	Honduras	Jamaica	Mexico	Montserrat I. (U.K.)	Netherland Antilles (Netherlands)	Nicaragua	Panama	Paraguay	Peru	Puerto Rico (U.S.)	Saint Kitts and Nevis	Saint Lucia	S. Vincent and the Grenadines	Suriname	Trinidad and Tobago	Turks and Caicos Islands (U.K.)	Uruguay	Venezuela	Virgin Islands (U.K.)	Virgin Islands (U.S.)	Brasilia/Washington OPMET Data Banks	SADIS and ISCS Uplink Stations/ Estaciones de Enlace Ascendente ISCS y SADIS
Lázaro Cárdenas	*MMLC*																																													*F*	
Leon	MMLO																																													F	F
Loreto	MMLT																																													F	F
Los Mochis	*MMLM*																																													*F*	
Manzanillo	MMZO																																													F	F
Matamoros	MMMA														F			T														F														F	F
Mazatlan	MMMZ			T															F																											F	F
Merida	MMMD					F	T	F			F			F	F				F				F		F	T					F	F		T	F											F	F
Mexicali	MMML																																													F	F
Mexico	MMMX			T		T		F	F	T		T	T	F	F		F	T	F				F			F					F	F		T	T								F			F	F
Minatitlán	*MMMT*																																													*F*	
Monterrey/Del Norte Intl.	MMAN																	T														F											F			F	F
Monterrey/Gral.Mariano Escobedo	MMMY																	T														F														F	F
Morelia	MMMM																																													F	F
Nogales	MMNG																																													F	F
Nuevo Laredo	MMNL																																													F	F
Oaxaca	*MMOX*																																													*F*	*F*
Piedras Negras	MMPG																																													F	F
Poza Rica	*MMPA*																																													*F*	
Puebla	*MMPB*																																													*F*	
Puerto Escondido Intl	*MMPS*																																													*F*	*F*
Puerto Vallarta	MMPR			T		T		F	F	T		T	T	F	F		F	T	F				F			F					F	F		T	T											F	F
Queretaro	*MMQT*																																													*F*	
Reynosa	MMRX																																													F	F
Saltillo	*MMIO*																																													*F*	
San Felipe	MMSF																																													F	F
San Jose del Cabo	MMSD			T															F																											F	F
San Luis Potosi	*MMSP*																																													*F*	*F*
Tampico	MMTM			T		T		F	F	T		T	T	F	F		F	T	F				F			F					F	F		T	T											F	F
Tapachula	MMTP																		F																											F	F
Tepic	*MMEP*																																													*F*	
Tijuana	MMTJ																																													F	F
Toluca	MMTO																																													F	F
Torreón	MMTC																	T														F														F	F
Tuxtla Gutiérrez	*MMTG*																																													*F*	
Uruapán	*MMPN*																																													*F*	
Veracruz	MMVR			T		T		F	F	T		T	T	F	F		F	T	F				F			F					F	F		T	T											F	F
Villahermosa	MMVA																																													F	F
Zacatecas	MMZC																																													F	F
…..																																															

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	ICAO Loc. Ind./Ind. Lugar OACI	Anguilla I. (U.K.)	Antigua and Barbuda	Argentina	Aruba (Netherlands)	Bahamas	Barbados	Belize	Bolivia	Brazil	Cayman Is. (U.K.)	Chile	Colombia	Costa Rica	Cuba	Dominica	Dominican Republic	Ecuador	El Salvador	French Antilles (France)	French Guiana (France)	Grenada	Guatemala	Guyana	Haití	Honduras	Jamaica	Mexico	Montserrat I. (U.K.)	Netherland Antilles (Netherlands)	Nicaragua	Panama	Paraguay	Peru	Puerto Rico (U.S.)	Saint Kitts and Nevis	Saint Lucia	S. Vincent and the Grenadines	Suriname	Trinidad and Tobago	Turks and Caicos Islands (U.K.)	Uruguay	Venezuela	Virgin Islands (U.K.)	Virgin Islands (U.S.)	Brasilia/Washington OPMET Data Banks	SADIS and ISCS Uplink Stations/ Estaciones de Enlace Ascendente ISCS y SADIS
SAM																																															
…..																																															
BOLIVIA																																															
Cobija	*SLCO*																																													*F*	*F*
Cochabamba	SLCB			F						T																						T	F	F									T			F	F
El Trompillo	*SLET*																																													*F*	*F*
La Paz	SLLP			F	~~F~~					F		F	F					T										T				F	F	F								F	T			F	F
Potosi	*SLPO*																																													*F*	*F*
Puerto Suarez	*SLPS*																																													*F*	*F*
Santa Cruz	SLVR			F						F		F	F																			F	F	F								F	T			F	F
Sucre	*SLSU*																																													*F*	*F*
Tarija	SLTJ			F						T																							F	F									T			F	F
Trinidad	SLTR																																F													F	F
…..																																															
CHILE																																															
Antofagasta	SCFA			F					F	T			T																			F		F												F	F
Arica	SCAR			F					F				T																			F	F	F												F	F
Balmaceda	*SCBA*																																													*F*	*F*
Calama	*SCCF*									*T*																																				*F*	*F*
Concepción	SCIE			F						~~T~~								T															F	F								F	T			F	F
Iquique	SCDA								F																								F	T												F	F
La Serena	*SCSE*																																													*F*	*F*
Osorno	*SCJO*																																													*F*	*F*
Puerto Montt	SCTE			F					F																									T												F	F
Punta Arenas	SCCI			F					F																																					F	F
Santiago/Arturo Merino Benitez	SCEL			F					F	F			T					T														F	F	F								F	T			F	F
…..																																															
PANAMA																																															
Bocas del Toro	MPBO																																													~~F~~	~~F~~
Changuinola	MPCH																																													~~F~~	~~F~~
David	MPDA			T	F	F			F	F	F	T	F	F	F		F	F	T				F		T	F	F	F		F	F			F	F					F			F			F	F
Panamá/Marco A. Gelabert	MPMG			T	F	F			F	F	F	T	F	F	F		F	F	T				F		T	F	F	F		F	F			F	F					F			F			F	F
Panamá/Tocumen	MPTO			T	F	F			F	F	F	T	F	F	F		F	F	T				F		T	F	F	F		F	F			F	F					F			F			F	F
…..																																															
PERU																																															
Andahuaylas	*SPHY*																																													*F*	*F*
Arequipa	SPQU											F																																		F	F
Ayacucho	*SPHO*																																													*F*	*F*
Cajamarca	*SPJR*																																													*F*	*F*

TO BE AVAILABLE IN/ESTARÁN DISPONIBLES EN

	ICAO Loc. Ind./Ind. Lugar OACI	Anguilla I. (U.K.)	Antigua and Barbuda	Argentina	Aruba (Netherlands)	Bahamas	Barbados	Belize	Bolivia	Brazil	Cayman Is. (U.K.)	Chile	Colombia	Costa Rica	Cuba	Dominica	Dominican Republic	Ecuador	El Salvador	French Antilles (France)	French Guiana (France)	Grenada	Guatemala
Chiclayo	SPHI			T	T				F	F	T	F	F	T	T			F					
Cuzco	SPZO								F														
Ilo	*SPLO*																						
Iquitos	SPQT									F	T		F										
Juanjuí	*SPJI*																						
Juliaca	*SPJL*																						
Lima-Callao	SPIM			T	T				F	T	T	F	F	T	T			F					
Pisco	SPSO			T					F	T	T	F	F	T	T			F					
Pucallpa	*SPCL*																						
Puerto Maldonado	*SPTU*																						
Tacna	SPTN			T					F			F											
Talara	*SPYL*																						
Tarapoto	*SPST*																						
Tingo María	*SPGM*																						
Trujillo	SPRU			T	T				F	T	T	F	F	T	T			F					
Tumbes	*SPME*																						
Yurimaguas	*SPMS*																						
…..																							
URUGUAY																							
Colonia/Laguna de los Patos Intl.	SUCA			F																			
Maldonado/Carlos Curbelo Intl.	SULS			F						F		F											
Montevideo/Angel S. Adami Intl.	SUAA			F						F													
Montevideo/Carrasco Intl.	SUMU			F					F	F		F	T		T								
Rivera/Presidente Gral. Oscar D. Gestido Intl.	SURV																						
Salto/Nueva Hesperides Intl.	SUSO			F																			
…..																							

	ICAO Loc. Ind./Ind. Lugar OACI	Guyana	Haití	Honduras	Jamaica	Mexico	Montserrat I. (U.K.)	Netherland Antilles (Netherlands)	Nicaragua	Panama	Paraguay	Peru	Puerto Rico (U.S.)	Saint Kitts and Nevis	Saint Lucia	S. Vincent and the Grenadines	Suriname	Trinidad and Tobago	Turks and Caicos Islands (U.K.)	Uruguay	Venezuela	Virgin Islands (U.K.)	Virgin Islands (U.S.)	Brasilia/Washington OPMET Data Banks	SADIS and ISCS Uplink Stations/ Estaciones de Enlace Ascendente ISCS y SADIS
Chiclayo	SPHI					T		F		F	F		T								F			F	F
Cuzco	SPZO																				T			F	F
Ilo	*SPLO*																							*F*	*F*
Iquitos	SPQT																							F	F
Juanjuí	*SPJI*																							*F*	*F*
Juliaca	*SPJL*																							*F*	*F*
Lima-Callao	SPIM					T		T		F	F										T			F	F
Pisco	SPSO									F	F										T			F	F
Pucallpa	*SPCL*																							F	*F*
Puerto Maldonado	*SPTU*																							*F*	*F*
Tacna	SPTN																							F	F
Talara	*SPYL*																							*F*	*F*
Tarapoto	*SPST*																							*F*	*F*
Tingo María	*SPGM*																							*F*	*F*
Trujillo	SPRU					T		T		F	F										T			F	F
Tumbes	*SPME*																							*F*	*F*
Yurimaguas	*SPMS*																							*F*	*F*
…..																									
URUGUAY																									
Colonia/Laguna de los Patos Intl.	SUCA										~~F~~													F	F
Maldonado/Carlos Curbelo Intl.	SULS										F	F												F	F
Montevideo/Angel S. Adami Intl.	SUAA																							F	F
Montevideo/Carrasco Intl.	SUMU					T				F	F	F									T			F	F
Rivera/Presidente Gral. Oscar D. Gestido Intl.	SURV										~~F~~													~~F~~T	~~F~~T
Salto/Nueva Hesperides Intl.	SUSO										~~F~~													F	F
…..																									

Table MET 3A — Tabla MET 3A

TROPICAL CYCLONE ADVISORY CENTRE
CENTRO DE AVISOS DE CICLONES TROPICALES

EXPLANATION OF THE TABLE

1	Location of the tropical cyclone advisory centre (TCAC).
2	ICAO location indicator of TCAC.
~~2~~3	Area of responsibility for the preparation of advisory information on tropical cyclones by the TCAC in Column 1.
~~3~~4	Period of operation of the TCAC.
~~4~~5	MWO to which the advisory information on tropical cyclones should be sent.
~~5~~6	Location indicator assigned to the MWO in Column 4.

EXPLICACIÓN DE LA TABLA

Columna	
1	Lugar del centro de avisos de ciclones tropicales (TCAC).
2	Indicador de lugar del TCAC
~~2~~3	Zona de responsabilidad para la preparación de la información de asesoramiento sobre ciclones tropicales por el TCAC en la Columna 1.
~~3~~4	Período de operación del TCAC.
~~4~~5	MWO a la que debe enviarse la información de asesoramiento sobre ciclones tropicales.
~~5~~6	Indicador de lugar de la OACI asignado a la MWO de la Columna 4.

Table MET 3A — Tabla MET 3A

Tropical cyclone advisory centre/Centro de avisos de ciclones tropicales	ICAO Loc. Ind / Ind. De Lugar OACI	Area of responsibility/ Zona de responsabilidad	Period of operation/ Período de operación	MWO to which advisory information is to be sent/ MWO a la que debe enviarse información de asesoramiento	
				Name/ Nombre	ICAO Loc. Ind./ Ind. de Lugar OACI
1	2	3	4	5	6
Miami (United States) (Estados Unidos)	KKCI	Tropical Atlantic, Caribbean Sea, Gulf of Mexico Relevant parts of the Pacific East of E1480º Atlántico Tropical, Mar del Caribe, Golfo de México Partes pertinentes del Pacífico al este de los 1480º E	1 June – 30 November 1 de junio – 30 noviembre	Bogotá Caracas Cayenne Timehri Habana Kingston México Kansas City Panama Port of Spain Port-au-Prince Recife Santo Domingo Tegucigalpa Willemstad Zandery	SKBO SVMI SOCA SYCJ MUHA MKJP MMMX KKCI MPTO TTPP MTPP SBREF MDSD MHTG TNCC SMJP

Table MET 3B — Tableau MET 3B — Tabla MET 3B

~~vaac~~Volcanic ash advisry centre/Centro de aviso de ceniza volcánica		Area of responsibility/ Zona de responsabilidad	ICAO Region/ Zona de la OACI	State/ Estado	MWO to which the information is to be sent/MWO a la que se enviará la información		ACC/FIC to which the information is to be sent/ACC/FIC a la que se enviará la información	
Name/ Nombre	ICAO Loc. Ind. Ind. de Lugar OACI				Name/ Nombre	ICAO Loc. Ind. Ind. de Lugar OACI	Name/ Nombre	ICAO Loc. Ind. Ind. de Lugar OACI
1	2	3	4	5	6	7	8	9
Buenos Aires (Argentina)	SABM	South of S10° between W10° and W90° Al sur de los 10°S entre 10°W y 90°W	SAM	ARGENTINA	Buenos Aires (Aeroparque)	SABE	Ezeiza	SAEF/ SAEU
					Comodoro Rivadavia	SAVC	Comodoro	SAVF/ SAVU
					Córdoba	SACO	Rivadavia	SACF/ SACU
					Mendoza	SAME	Mendoza	SAMF/ SAMV
					Resistencia	SARE	Resistencia	SARR/ SARU
				BOLIVIA	La Paz	SLLP	La Paz	SLLF
				BRAZIL	Amazónico~~a~~/CINDACTA IV	SBAZ~~SBEG~~	Amazónic~~a~~o	SBAZ
					Brasilia/CINDACTA I	SBBS~~SBBR~~	Brasilia	SBBS
					Curitiba/CINDACTA II	SBCW~~SBCT~~	Curitiba	SBCW
					Recife/CINDACTA III	SBRE~~SBRF~~	Recife	SBRE
					Recife/CINDACTA III	SBRE~~SBRF~~	Atlántico	SBAO
				CHILE	Antofagasta	SCFA	Antofagasta	SCFZ
					Puerto Montt	SCTE	Puerto Montt	SCTZ
					Punta Arenas	SCCI	Punta Arenas	SCCZ
					Santiago	SCEL	Santiago	SCEZ
				PARAGUAY	Asunción	SGAS	Asunción	SGFA
				PERU	Lima-Callao	SPIM	Lima	SPIM
				URUGUAY	Montevideo	SUMU	Montevideo	SUEO
Washington (United States)	KNES	North of S10° 140°W Al norte de los 10°S 140°W New York Oceanic* Oakland Oceanic* United States Continental FIRs*	SAM	BRAZIL	Amazónico/CINDACTA IV	SBAZ~~SBEG~~	Amazónic~~a~~o	SBAZ
					Recife/CINDACTA III	SBRE~~SBRF~~	Recife	SBRE
					Recife/CINDACTA III	SBRE~~SBRF~~	Atlántico	SBAO
			SAM	COLOMBIA	Santa Fe de Bogotá	SKBO	Barranquilla	SKEC
					Santa Fe de Bogotá	SKBO	Bogotá	SKED
			CAR	CUBA	Habana	MUHA	Habana	MUFH
			CAR	DOMINICAN REPUBLIC	Santo Domingo	MDSD	Santo Domingo	MDCS
			SAM	ECUADOR	Guayaquil	SEGU	Guayaquil	SEGU
			SAM	FRENCH GUIANA (France)	Cayenne	SOCA	Rochambeau	SOOO
			SAM	GUYANA	Timehri	SYCJ	Georgetown	SYGC
			CAR	HAITI	Port-au-Prince	MTPP	Port-au-Prince	MTEG
			CAR	HONDURAS	Tegucigalpa	MHTG	Central American	MHTG
			CAR	JAMAICA	Kingston	MKJP	Kingston	MKJK
			CAR	MEXICO	México	MMMX	Mazatlán	MMZT
					México	MMMX	México	MMEX
			CAR	NETHERLANDS ANTILLES (Netherlands)	Willemstad	TNCC	Curacao	TNCF
			SAM	PANAMA	Panamá	MPTO	Panamá	MPZL
			SAM	PERU	Lima - Callao	SPIM	Lima	SPIM
			SAM	SURINAME	Zandery	SMJP	Paramaribo	SMPM
			CAR	TRINIDAD AND TOBAGO	Port of Spain	TTPP	Piarco	TTZP
			NAM	UNITED STATES	Kansas City	KKCI	Houston Oceanic	KZHU
					Kansas City	KKCI	Miami Oceanic	KZMA
					~~Kansas City~~	~~KKCI~~	~~Nassau~~	~~MYNA~~
					Kansas City	KKCI	San Juan	TJZS
			SAM	VENEZUELA	Caracas	SVMI	Maiquetía	SVZM

Table MET 3C — Tabla MET 3C

Provider State of volcano observatory Estado Proveedor del observatorio de volcanes	Volcano observatory Observatorio de volcanes	VAAC to which the information is to be sent VAAC al cual se debe enviar la información	ACC to which the information is to be sent ACC a la cual se debe enviar la información		MWO to which information is to be sent MWO a la cual se debe enviar la información	
			Name Nombre	ICAO Loc Ind. Ind. de lugar OACI	Name Nombre	ICAO Loc Ind. Ind. De lugar OACI
1	2	3	4	5	6	7
....						
Costa Rica	Observatorio de volcanes y Sismológico de Costa Rica, (OVSICORI-UNA), Heredia ~~Obs. Sismológicao y vulcanológico de Arenal y Miravalles, San José~~	Washington	Central American	MHTG	Tegucigalpa	MHTG
....						
El Salvador	Servicio Nacional de Estudios Territoriales (SNET), Ministerio de Medio Ambiente y Recursos Naturales, (MARN), El Salvador					
....						
Trinidad ~~&~~ y Tao~~o~~bago	Seismic Research Unit, University of Indies St. Augustine	Washington	Piarco	TTZP	Port of Spain	TTPP

Table MET 7 / Tabla MET 7

International Satellite Communication System (ISCS/1) provided by the United States Systeme de communications internationales par satellite (ISCS/1) fourni par les États-Unis Sistema Internacional de comunicaciones por satélite (ISCS/1) proporcionado por Estados Unidos			
State/Territory État/Territoire Estado/Territorio	User of satellite broadcast Utilisateur des diffusions par satellite Usuario de la radiodifusión por satélite	Location of VSAT Emplacement du VSAT Lugar del la VSAT	Equipment operational Équipement pérationnel Equipo operativo
1	2	3	4
... COLOMBIA ...	NMS	Headquarters of the Hydrology and Met Institute, Bogotá Bogotá/Eldorado	2w 1W

APPENDIX D

SAMPLE QUESTIONNAIRE TO GATHER INFORMATION FROM THE STATES REGARDING THE OPINION OF CIVIL AVIATION AUTHORITIES ON THE RELEVANCE AND CONSEQUENCES OF USING AERONAUTICAL STUDIES TO FULFILL POSSIBLE DEFICIENCIES

This objective of this questionnaire is to help establish the criteria to utilize aeronautical studies in the AGA field, as a support before States authorities, of rules and standards.

1) In your State, is it accepted by your aerodromes legislation to present an AGA aeronautical study, when physical or operational restrictions should prevent the fulfillment of rules and standards?

2) In your State, is there any expressed ruling disposition in your aerodrome related legislation that considers AGA aeronautical studies as an alternative for the case mentioned in number 1?

3) If you answered yes to the previous question, is there in your State aerodrome related legislation that mentions AGA aeronautical studies, any orientation on applicability (specific cases), focus, and minimal content the studies shall comply with to be accepted by the ruling authority?

4) If your answer to questions 2 and 3 was affirmative is there any case of AGA aeronautical studies validated by the ruling authority in your State?

5) If you answered yes to question 4, would your State be willing to share its experience in that field?

6) In case your answer to question 2 was negative, would your State consider useful to include the concepts mentioned in questions 2 and 3 in your legislation?

7) In the case that your State would generate legislation on AGA aeronautical studies, what technical criteria would you consider to use as a basement for it?

8) An AGA aeronautical study is meant to mitigate a risk due to a non conformity with a ruling disposition; this generates responsibilities in case of an accident related with the ruling of which compliance the study was supporting; what would be the opinion of your State regarding this matter?

9) Does your State consider that AGA aeronautical studies, as far as they are validated by the ruling authority, may be useful in aerodrome certification processes?

10) Is there any comment your State would like to contribute with, regarding the AGA aeronautical studies?

APPENDIX E

PROGRESS OF THE AGA/AOP SUBGROUP ON THE CAR/SAM/3 RAN MEETING CONCLUSIONS AND OTHER IMPORTANT ISSUES FOR THE CAR/SAM REGIONS

(Progress obtained in 2007 and 2007 are shaded in this Appendix)

CAR/SAM/3 RAN		Results obtained by the AGA/AOP/SG	Obtained PRODUCTS	Used Methods
2/1	**Planning for en-route alternate aerodromes**	---	List of en-route alternate aerodromes	Preliminary list prepared by IATA, circulated twice to States/Territories and reviewed by ICAO
3/2	**Amendment of the Table AOP 1**	Preparation of proposal for amendment for Bolivia, Brazil, Chile, Peru, Suriname and Uruguay	Up to now 4 Amendments were originated by the SAM Region	Letters with the Proposals were circulated to the States and Territories
¾	**Aerodromes in the vicinity of international boundaries**	Draft Conclusion of the Subgroup to have States preparing bilateral agreements	Waiting information from States and Territories	Waiting information from States and Territories
3/5	**Retention of visual and non-visual aids in excess of those tabulated in Table AOP 1**	Conclusion of the Subgroup provides that States that provide visual and non visual aids consider their preservation for safety purposes	Waiting information from States and Territories	Waiting information from States and Territories
4/3	**Resources for implementation of aerodrome facilities and services**	Conclusion of the Subgroup provides that States adopt measures to have airport revenues allotted to facilities and services	Waiting information from States and Territories	Waiting information from States and Territories
4/4	**Aerodrome equipment, installations and services**	no	---	Actions taken in regular missions to States carried out by NACC and SAM Regional Offices
4/7	**Updating of disabled aircraft removal plan**	Conclusion of the Subgroup for States to update in consultation with aircraft operators and manufacturers the plans for disabled aircraft removal	Actions are being carried out by the States/Territories	Contacts with specialized enterprises and agreements with local companies Regular missions to States

CAR/SAM/3 RAN		Results obtained by the AGA/AOP/SG	Obtained PRODUCTS	Used Methods
4/8	**Rescue and fire fighting services**	Has just started (Emergency Plans/EOC)	Specific training to States/Territories/Airport Operators	Workshop on Emergency Plan/ Emergency Operations Centres (EOC), held in Santiago, Chile, 13-17 NOV 2006
4/9	**Implementation of aerodrome emergency plans**	Proposal to create an Emergency Plan / Emergency Operation Centre (EOC) Task Force –AGA/AOP/SG/04 Meeting	Waiting information from States and Territories	Waiting information from States and Territories Workshop on Emergency Planning and Emergency Operations Centres (EOC) , held in Santiago, Chile, 13-17 NOV 2006
4/10	**Bird hazard control and reduction**	---	Creation of the CAR/SAM Regional Bird Hazard Prevention Committee Reactivation of two National Committees (Argentina and Uruguay) Creation of 3 National Committees (Colombia, Cuba and Mexico) There was one in Brazil and Panama Creation of 66 Airport Coordinating Committees (there were none) + 3 Committees in Venezuela and reactivation of the Nicaragua Committee	Task Force Technical Meeting (Seminar) for the Creation of the Regional Committee Convening of 3 International Conferences and the fourth one planned to be held in, Panama, from 4 to 8 December 2006 Fourth International Conference on Bird and Wildlife Hazard Prevention, Guayaquil, Ecuador, 1-5 October 2007 Fifth International Conference on Bird and Wildlife Hazard Prevention, Brasilia, Brazil, November 2008
4/11	**Power supply at aerodromes**	no	---	Actions taken in regular missions to States carried out by NACC and SAM Regional Offices
4/12	**Aerodrome fencing**	Conclusion of the Subgroup provides that States urgently install and maintain fences at aerodromes in order to prevent the entrance of persons and animals Proposal to GREPECAS for ICAO to study the implementation of fences at aerodromes in compliance with Annex 17 (At ICAO Headquarters for the proper consideration)	Some States have corrected these deficiencies in their international airports, however, more information is needed Waiting information from States and Territories	Regular missions of AGA Regional Officer – Regional Offices

CAR/SAM/3 RAN		Results obtained by the AGA/AOP/SG	Obtained PRODUCTS	Used Methods
4/13	**Establishment of preventive maintenance programmes**	Conclusion for States to take measures for airport operators to implement and keep aerodrome maintenance programmes that are intended to eliminate and prevent deficiencies that have a direct impact on safety	Foundation of ALACPA – Latin American and Caribbean Airport Pavement Association (July 2002) Translation of the Handbook of Airport Infrastructure Maintenance Management (Review Phase) Preparation of a Guidance Manual for Aerodrome Inspection in the CAR/SAM Regions in accordance with Annex 14 Specific training	Seminar on Pavement Maintenance and Short Course on the aircraft/pavement interaction, Santa Cruz de la Sierra, Bolivia, 22-27 July 2002 (62 participants) Coordination with the ICAO Technical Cooperation Bureau ICAO Workshop on Aerodrome Certification for the NAM/CAR/SAM Regions, Spanish Santiago, Chile, 24 to 27 September 2002 (88 participants) ICAO.ACI/LAC Seminar on Pavement Management Systems (PMS) Short Course on the PCI Method (Pavement Condition Index) for the CAR/SAM Regions, Lima, Peru, from 19 to 25 November 2003 (128 participants) ICAO Workshop for Aerodromes Inspectors for the NAM/CAR/SAM Regions, Argentina, Buenos Aires, 2004 (129 participants) ICAO/ALACPA/FAA/ACI-LAC Seminar on Airfield Pavement Design. New FAA Design Software, and Short Course on Annex 14 and Related Documents for the NAM/CAR/SAM Region (Americas) Bogota, Colombia, 11-16 September 2005 (196 participants) Workshop on Emergency Plans/Emergency Operations Centres (EOC), Santiago, Chile, 13-17 November 2006 ICAO/ACI/FAA/ALACPA/ICAI Seminar on Pavement Evaluation, Rehabilitation and Overlay Design/New FAA Design Software For Airport Pavement Overlay Workshop/Short Course on Maintenance of Air Navigation Visual Aids, Lima, Perú, 12 to 17 November 2007

CAR/SAM/3 RAN	Results obtained by the AGA/AOP/SG	Obtained PRODUCTS	Used Methods
4/14 Land use at airports and adjacent areas	That States review and adopt regulations that regulate land use in the adjacent areas of an airport That ICAO studies the inclusion in Annex 14 of the specifications related to noise and hazard of constructions in order to minimize the severity of damages in case an accident occurs during landing or take-off (Being considered by the ICAO AGA Section)	Waiting information from States and Territories	Matter submitted to ICAO Headquarters through the GREPECAS

OTHER ISSUES DEALT BY THE SUBGROUP

CAR/SAM/3 RAN	Results obtained by the AGA/AOP/SG	Obtained PRODUCTS	Used Methods
Airport Demand and Capacity (Terms of Reference of the Subgroup)	On-going	Waiting information from States and Territories	Task Force Creation
Acoustic, pollution and treatment of residues Conditions (Terms of Reference of the Subgroup)	---	Translation of the Environment Manual Document distributed by the Regional Offices to States/Territories	Coordination with the ICAO Technical Cooperation Bureau
Runway Incursions (Terms of Reference of the Subgroup)	Update of the "Runway Incursion" definition by ICAO Proposal to have all activities related to WILDLIFE be treated by the Bird Hazard Committee in order to coordinate actions in aspects related to runway incursions (On-going)	Guide for Prevention Runway Incursion, prepared by the Task Force	Task Force Work
Runway Strips and Runway End Safety Areas (RESA)	Conclusion of the Subgroup to have States evaluate the provision of RESA and to publish the reduction of dimensions in the AIP Presentation and review of the information from the deficiencies database That IATA supports the Task Force to evaluate the impact of reduced declared distances for aircraft operations Relevance of the situation of the CAR/SAM Regions for the corrections to keep in mind for the solution of problems	Preparation of Pavements Maintenance Guidance Guide Preparation on construction modality and maintenance RESAS (EMAS) Statistical indications that differentiate the RESA problems (CAR Region, lack of RESA). SAM Region (Problems in RESAs such as obstacles and unevenness). This allows the indication of different regional strategies for the elimination/control of deficiencies for each Region	Task Force Creation Seminar on Pavement Maintenance and Short Course on the aircraft/pavement interaction, Santa Cruz de la Sierra, Bolivia, 22-27 July 2002 (62 participants) Actions taken by the Task Force

APPENDIX F

ERROR PREVENTION PROGRAMME IN THE COMMUNICATIONS BETWEEN ADJACENT ACCs

There are many initiatives that can be pursued to prevent operational errors from occurring. However, there are five primary areas, which can directly contribute to its prevention: **communications, phraseology, supervision, teamwork, and ATC proficiency**. In an effort to accomplish the goal of reducing communication errors between adjacent Area Control Centres and thus reduce or minimize the occurrence of large-height deviations, the following objectives should be included in the prevention programme:

The ATS authority shall:

a) identify individual, procedural, and/or equipment deficiencies used in air traffic services;

b) promptly correct individual, procedural, and/or equipment deficiencies which affect coordinations with adjacent and ATS units. This can be achieved through:
   - guidance on procedures to be followed;
   - implementation of read-back/hear-back programmes;
   - training in the filling of LHD forms;
   - increase and/or closer monitoring of ATCOs performance;
   - immediate coordination programme after a re-authorization or change in flight level;
   - changes in procedures and/or corrections/amendments of equipment.

c) communicate performance expectations to ATS supervisors and controllers;

d) ensure the ATS unit maintains a summary of and have information letters on operational errors, causal factors and trends, and incorporate them into training;

e) monitor and evaluate voice recordings (all ATS operational personnel);

f) take initiatives to improve communications among all ATS personnel to create an atmosphere conducive to sharing information;

g) exercise strict monitoring in ATC units;

h) ATS supervisors should:
   - communicate performance expectations to controllers, stressing the importance of operational control position discipline, awareness, teamwork, the use of proper phraseology, proper coordination procedures, control position relief briefings and utilization of a position relief checklist;
   - take prompt follow-up actions when controller performance does not meet with expectations;

- inform on individual and team accountability, and the consequences for not meeting expectations;
- provide efficient and consistent oversight of the ATS unit operation, and use effective resource management to ensure proper and timely assignment of personnel to promote the safe, orderly, and expeditious handling of air traffic;
- ensure that distractions and noise levels in the ATS unit are kept at a minimum;
- require all personnel to maintain a high degree of professionalism, teamwork, control position discipline, and awareness at all times in the ATS unit environment; and require that each controller knows, applies, and adheres to the appropriate requirements in the performance of his/her operational duties and responsibilities;
- promote an open flow of communications with all ATS personnel, allowing them to provide input to programme;
- place emphasis on hear-back/read-back errors during team meetings.

i) ATC personnel should:

- apply read-back/hear-back procedures when carrying out ATC coordinations;
- keep ATS supervisors advised of traffic problems and equipment limitations;
- make suggestions for ATS unit improvements and/or prevention of operational errors;
- maintain situational awareness;
- extend the extra effort to assist busier control position(s);
- continuously review their own operating techniques and ATS unit procedures to effect the highest quality of performance;
- promptly report all ATS incidents to the operational supervisor or other appropriate ATS authority for proper follow-up investigation;
- utilize memory aids.

VOICE RECORDING EVALUATIONS

Voice recording reviews should be conducted to ensure proper phraseology, good operating practices, and adherence to the standards set forth in ICAO provisions, and national/local directives and practices. Voice recording reviews should be conducted as follows:

a) the ATS unit should ensure that voice recording reviews are conducted at least semi-annually on all ATS operational personnel;

b) the ATS supervisor should review the voice recording, document comments and develop an action plan for documenting performance deficiencies; and

c) the ATS supervisor and the controller should review and discuss the voice recording.

Actions suggested as short term solution

a) That States, authorities and International Organizations continue their excellent compliance with the LHD requirements to report CARSAMMA on a monthly basis, and

b) That States, authorities and International Organizations distribute a copy of category "M", Error messages in ATC unit to ATC unit in transference messages and category "N", messages ("No ATC unit transference message was received"), received from transitioning ATC-unit LHD reports only to the adjacent ACC involved in addition to CARSAMMA.

c) When a trend is identified from shared reports, the States, Territories, and International Organizations shall share information and shall meet on a bilateral basis to develop a solution to the cause of the identified LHD.

d) Since some ACCs adjoin international oceanic airspace, ICAO NACC and SAM Regional Offices are requested to advise the corresponding adjacent ICAO regional Offices (EUR/NAT, WACAF) that said LHD report will be forthcoming from the adjacent ACC and urge positive interaction with reporting CAR/SAM unit.

Supported suggested actions as a medium term solution:

a) In an effort to eliminate the largest contributing LHD error category "M", the solution is to implement a quality management programme based upon safety management concepts outlined in Annex 11 amendment 44.

b) The "*Progressive implementation of ATS interfacility data communications (AIDC)*" will enhance the safety of the airspace and would reduce category "M" error. However, it is a medium term project incurring a large expense and hereby encourages that the CAR/SAM Regions States begin arrangements to submit to the World Bank an application for sufficient monies to enhance such implementation systems. The Meeting recalled that the AIDC is seen within the Automation Task Force Program and therefore is not required another action at this point.

APPENDIX G

SEAMLESS ATM SYSTEM

REGIONAL PLANNING PROCESS

The regional planning process shall be conducted in accordance with the global plan initiatives (GPIs) of the Global Plan (Doc 9750) and the ICAO vision for an integrated ATM system, harmonized and interoperable, as established in the Global ATM Operational Concept (Doc 9854).

The objective is to achieve the maximum level of inter-operability and harmonization among sub-systems for a seamless and interoperable regional ATM system for all users during all phases of flight, complying with agreed levels of safety, providing optimum economic operations, to be environmentally sustainable and to fulfil national aviation security requirements.

The planning should be developed based on clearly defined performance objectives. The planning horizon should be focused on the strategies of development, activities or main tasks for two periods – that of less than 5 years (short-term) and 6 to 10 years (medium-term). Some already identified tasks to be analyzed beyond this period may be included if they conform to ICAO ATM requirements**.**

ATM PERFORMANCE OBJECTIVES

The performance objectives for regional ATM work programmes should be developed with performance based approach that best reflects the necessary activities needed to support regional ATM system implementation.

During its life cycle, the performance objectives may change in a dynamic manner depending on the ATM system's evolution; therefore, these should be coordinated with and available to all interested parties within the ATM Community in order to achieve timely communication throughout the implementation process. The establishment of collaborative decision making processes (CDM) ensures that all stakeholders are involved in and concur with the requirements, tasks and timelines.

The following sections describe aspects pertaining to the performance objectives and required changes, and how these changes foster harmonized improvements throughout the regional ATM system.

Benefits

The ATM implementation strategies should provide a group of common benefits for all stakeholders and be achieved through the operational and technical activities planned in each performance objective. These benefits should be in accordance with the ICAO strategic objectives.

Identification of work

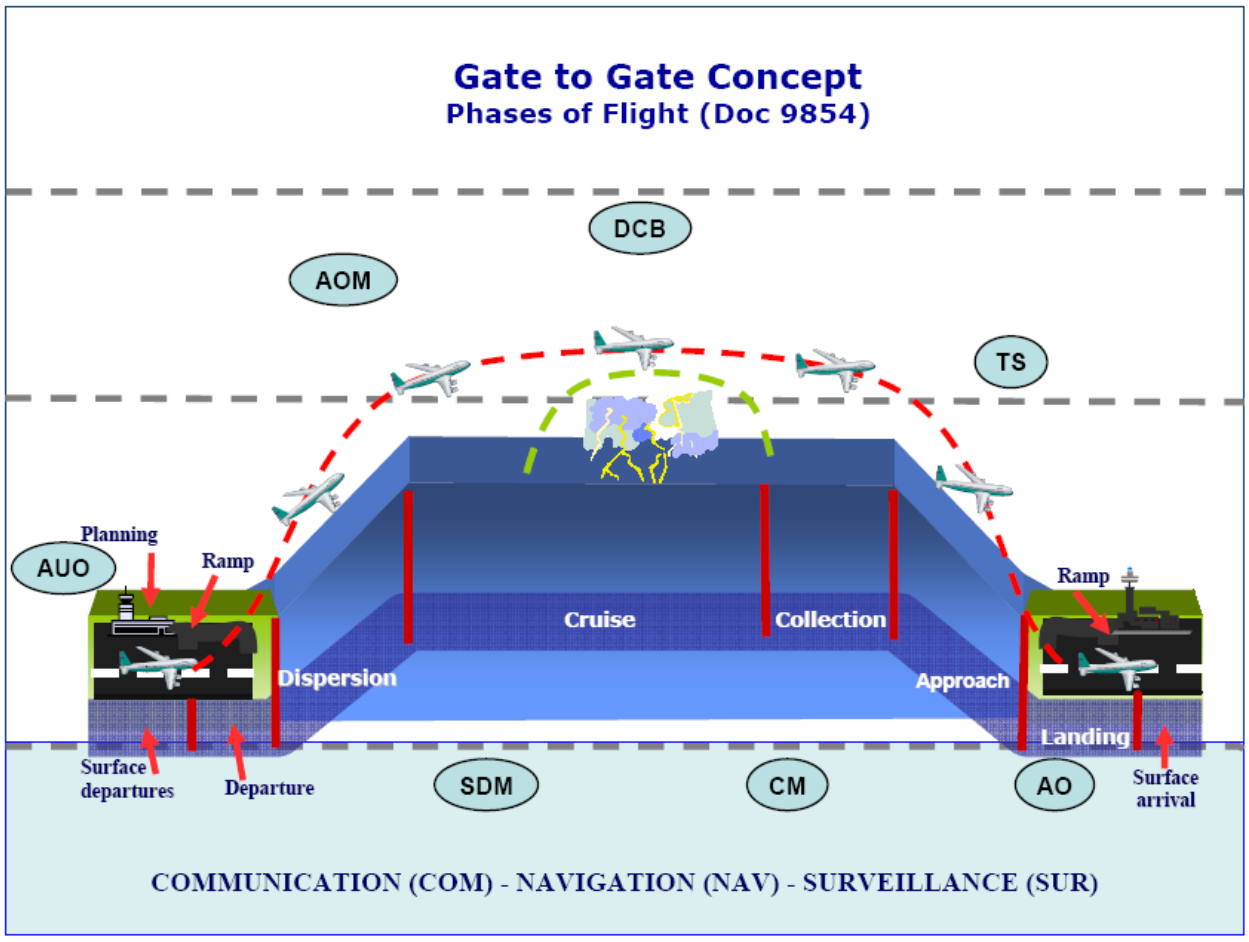
Each strategy or set of activities should be identified with associated components of the ATM system when describing the tasks. According to the Doc 9854, the designators for ATM components are as follows:

- **AOM** — Airspace organization and management
- **DCB** — Demand and capacity balancing
- **AO** — Aerodrome operations
- **TS** — Traffic synchronization
- **CM** — Conflict management
- **AUO** — Airspace user operations
- **ATM SDM** — ATM service delivery management

Each ATM system component pertains to tasks and activities related to phases of air operations (en-route, terminal and airport), capacity management, airspace management including its flexible use and aeronautical information management.

The infrastructure includes the ground technical systems and capacity required to support operations such as communications, navigation and surveillance, data processing, inter-operability of systems, information management system and spectrum management, including both civil and military systems.

The following diagram shows the ATM components in relation to the phases of flight:



ATM evolution requires a clearly defined progressive strategy including tasks and activities which best represent the regional and national planning processes in accordance with the global planning framework. The goal is to obtain a harmonized regional implementation evolving toward a seamless global ATM system.

For this reason, it is necessary to develop short and medium term work programmes, focusing on the necessary changes to the system in which a clear work commitment will be carried out by the parties involved.

The regional work programmes should define additional tasks and activities, maintaining a direct relation with ATM system components such as airspace organization, civil-military coordination, human factors, aeronautical regulations, operational safety systems management and environmental protection, among others.

The referenced framework for regional activities should also include the coordination of activities with military authorities who play an important role in helping to ensure that the best use is made of the available airspace resources by all airspace users while still safeguarding national security.

The following principles should be considered when developing work programmes:

- The work should be organized using project management techniques and performance-based objectives in alignment with the strategic objectives of ICAO. The work programmes should be in accordance with the progress, characteristics and regional implementation needs.

- All activities involved in accomplishing the performance objectives should be designed following strategies, concepts, action plans and roadmaps which can be shared among States to align the regional work with the fundamental objective of achieving interoperability and seamlessness to the highest level.

- The planning of activities should include optimizing human resources, as well as encouraging dynamic use of electronic communication between States such as the Internet, videoconferences, teleconferences, e-mail, telephone and facsimile. Additionally, it should be ensured that resources will be efficiently used, avoiding any duplication or unnecessary work.

- The new work process and methods should ensure that performance objectives can be measured against timelines and the regional progress achieved can be easily reported to the Air Navigation Commission and to the ICAO Council.

Status

The status is mainly focused on monitoring the progress of the implementation activity as it progresses toward a specific completion date. The status of the activity is defined as follows:

■**Valid**	the feasibility and benefits of an activity has been confirmed, work has been initiated but the activity itself has not been finalized.
■**Completed**	implementation of the activity has been finalized by the involved parties.
■**Tentative**	the feasibility and benefits of an activity is being investigated or developed.

A tentative status indicates a potential activity; normally this activity will not be included in the regional planning documents unless it is an ICAO defined requirement.

Relationship between Performance Objectives and Global Plan Initiatives

The 23 GPIs provide a global strategic framework and are designed to contribute to achieving the regional performance objectives and to support the logical progression of regional implementation work programmes.

Each performance objective should be referenced to the pertinent GPIs. The goal is to ensure that the evolutionary work process will be integrated into the global planning framework

NATIONAL ACTION PLANS

States shall develop their own national action plans reflecting the specific activities or tasks along with the expected benefits to be obtained and the date by which each one should be completed according to its own needs and based on the regionally-agreed performance objectives. States should submit their national action plans to the ICAO regional Offices so they may report regional achievements to the Council of ICAO.

The activities should include the necessary detailed actions to successfully achieve the national performance objectives, relating these activities with the short and medium term regionally-agreed performance objectives.

National plans should identify the individual parties responsible for achieving the objectives as well as a means for monitoring and eventually reporting progress on the actions to ICAO. The responsibilities and time-tables should be clearly defined so that the involved parties are aware of their commitments throughout the planning process.

Additionally, national action plans should include adequate means to provide information on implementation progress achieved such as through a periodic reporting process. This facilitates senior management levels' efforts to prioritize the actions and resources required. The same information provided to ICAO will allow feedback and assistance to be provided specific for each Region as they work to achieve a Global ATM system.

PBN APP Action Plan GPI 1, 12, 16, 21, 23			
1 Airspace Concept	**Start**	**End**	**Remarks**
1.1 Establish and prioritize Strategic Objectives (Safety, Capacity, Environment, etc)			
1.2 Analyse aircraft fleet navigation capacity operating in the Airport			
1.3 Analyse communication, ground navigation (VOR, DME) and surveillance for navigation specification and reversionary mode compliance			
1.4 Design Instrument Approach Procedure (RNP APCH/APV Baro-VNAV or RNP AR), based on the strategic objective of the airspace concept. Consider Airspace Modelling, ATC simulations (fast time and/or real time), Live Trials, etc.			
2 Develop Performance Measurement Plan			
2.1 Prepare Performance Measurement Plan, including gas emission, safety, efficiency, etc.			
2.2 Conduct Performance Measurement Plan			
3 Procedure safety assessment			
3.1 Determine which methodology shall be used to evaluate procedure safety, depending on the navigation specification. Consider Airspace Modelling, ATC simulations (fast time and/or real time), Live Trials, etc.			
3.2 Prepare a data collection programme for airspace safety assessment			
3.3 Prepare preliminary procedure (s) safety assessment			
3.4 Prepare final procedure (s) safety assessment			
4 Establish collaboration decision making (CDM) process			
4.1 Coordinate planning and implementation needs with Air Navigation Service Providers, Regulators, Users, aircraft operators and military authorities			
4.2 Establish implementation date			
4.3 Establish the documentation format of CAR/SAM RNAV/RNP Website			

PBN APP Action Plan GPI 1, 12, 16, 21, 23			
4.4 Report planning and implementation progress to the corresponding Regional Office			
5 ATC Automated Systems			
5.1 Evaluate the PBN implementation in the ATC Automated Systems, considering the Amendment 1 to the PANS/ATM (FPLSG).			
5.2 Implement the necessary changes in the ATC Automated Systems			
6 Aircraft and operator approval			
6.1 Be aware of the national implementation programme and of the required navigation specifications			
6.2 Analyse aircraft approval requirements, aircrew and operator approval requirements for the navigation specifications to be implemented, as contained in the ICAO PBN Manual			
6.3 Publish the national regulations to implement the required ICAO navigation specifications			
6.4 Approval of aircraft and operators for each type of procedure and navigation specification			
6.5 Establish and keep updated a record of approved aircraft and operators			
6.6 Verify operations with a continuing monitoring programme			
7 Standards and procedures			
7.1 Evaluate regulations for GNSS use, and if such were the case, proceed to its publication.			
7.2 Develop and publish AIC notifying PBN implementation planning			
7.3 Publish AIP Supplement including applicable standards and procedures			
7.4 Review Procedural Manuals of the ATS units involved			

PBN APP Action Plan GPI 1, 12, 16, 21, 23			
7.5 Update Letters of Agreement between ATS units, if necessary			
7.6 Provide procedures to accommodate non-approved RNAV/RNP aircraft, when applicable			
7.7 Conduct ATC simulations to identify the workload/operational factors, if necessary.			
8 Training			
8.1 Develop a training programme and documentation for operators (pilots, dispatchers and maintenance)			
8.2 Develop training programme and documentation for Air Traffic Controllers and AIS Operators			
8.3 Develop training programme to regulators (aviation safety inspectors)			
8.4 Conduct training programmes			
8.5 Hold seminars oriented to operators, indicating the plans and the operational and financial benefits expected			
9 Decision for implementation			
9.1 Evaluate operational documentation availability (ATS, OPS/AIR)			
9.2 Evaluate the percentage of approved aircraft and operations (mixed equipage concerns)			
9.3 Review safety assessment results			
10 System Performance Monitoring			
10.1 Develop post-implementation APP operations monitoring programme			
10.2 Execute post-implementation APP operations monitoring programme			
Pre operational implementation date			

PBN APP Action Plan GPI 1, 12, 16, 21, 23			
Definitive implementation date			

ATS Routes Optimization Action Plan GPI 1, 4, 5, 7, 8, 10, 11, 12, 16, 21,23			
	Start	**End**	**Remarks**
1 Airspace Concept			
1.1 Establish and prioritize Strategic Objectives (Safety, Capacity, Environment, etc)			
1.2 Collect air traffic data to understand airspace traffic flows in a particular airspace.			
1.3 Analyse navigation capability of the fleet			
1.4 Analyse communication, ground navigation (VOR, DME) and surveillance for navigation specification and reversionary mode compliance.			
1.5 Optimise the airspace structure, by reorganising the network or implementing new routes based on the strategic objective of the airspace concept. Consider Airspace Modelling, ATC simulations (fast time and/or real time), Live Trials, etc.			
2 Develop Performance Measurement Plan			
2.1 Prepare Performance Measurement Plan, including gas emission, safety, efficiency, etc.			
2.2 Conduct Performance Measurement Plan			
3 Airspace safety assessment			
3.1 Determine which methodology shall be used to evaluate airspace safety and ATS routes spacing, depending on the navigation specification. Consider Airspace Modelling, ATC simulations (fast time and/or real time), Live Trials, etc.			
3.2 Prepare a data collection programme for airspace safety assessment			
3.3 Prepare preliminary airspace safety assessment			
3.4 Prepare final airspace safety assessment			

ATS Routes Optimization Action Plan GPI 1, 4, 5, 7, 8, 10, 11, 12, 16, 21,23			
	Start	**End**	**Remarks**
4 Establish collaboration decision making (CDM) process			
4.1 Coordinate planning and implementation needs with Air Navigation Service Providers, Regulators, Users, aircraft operators and military authorities			
4.2 Establish implementation date			
4.3 Establish the documentation format of CAR/SAM RNAV/RNP Website			
4.4 Report planning and implementation progress to the corresponding Regional Office			
5 ATC Automated Systems			
5.1 Evaluate the PBN implementation in the ATC Automated Systems, considering the Amendment 1 to the PANS/ATM (FPLSG).			
5.2 Implement the necessary changes in the ATC Automated Systems			
6 Aircraft and operators approval			
6.1 Be aware of the national implementation programme and of the required navigation specifications			
6.2 Analyse aircraft approval requirements, aircrew and operator approval requirements for the navigation specifications to be implemented, as contained in the ICAO PBN Manual			
6.3 Publish the national regulations to implement the required ICAO navigation specifications			

ATS Routes Optimization Action Plan GPI 1, 4, 5, 7, 8, 10, 11, 12, 16, 21,23			
	Start	**End**	**Remarks**
6.4 Approval of aircraft and operators for each type of procedure and navigation specification			
6.5 Establish and keep updated a record of approved aircraft and operators			
6.6 Verify operations with a continuing monitoring programme			
7 Standards and Procedures			
7.1 Evaluate regulations for GNSS use, and if such were the case, proceed to its publication.			
7.2 Finalize implementation of WGS-84			
7.3 Develop and publish AIC notifying PBN implementation planning			
7.4 Publish AIP Supplement including applicable standards and procedures			
7.5 Review Procedural Manuals of the ATS units involved			
7.6 Update Letters of Agreement between ATS units			
7.7 Develop amendment to the regional documentation, if necessary			
7.8 Provide procedures to accommodate non-approved RNAV/RNP aircraft, when applicable			
7.9 Identify transition areas and procedures, if necessary			
7.10 Conduct ATC simulations to identify the workload/operational factors, if necessary, and report the simulations activities to the ATM Committee.			
8 Training			

ATS Routes Optimization Action Plan GPI 1, 4, 5, 7, 8, 10, 11, 12, 16, 21,23			
	Start	**End**	**Remarks**
8.1 Develop a training programme and documentation for operators (pilots, dispatchers and maintenance)			
8.2 Develop training programme and documentation for Air Traffic Controllers and AIS Operators			
8.3 Develop training programme to regulators (aviation safety inspectors)			
8.4 Conduct training programmes			
8.5 Hold seminars oriented to operators, indicating the plans and the operational and financial benefits expected			
9 Decision for implementation			
9.1 Evaluate operational documentation availability (ATS, OPS/AIR)			
9.2 Evaluate the percentage of approved aircraft and operations (mixed equipage concerns)			
9.3 Review safety assessment results			
10 System Performance Monitoring			
10.1 Develop post-implementation en-route operations monitoring programme			
10.2 Execute post-implementation en-route operations monitoring programme			
Pre operational implementation date			
Definitive implementation date			

APPENDIX H

TABLE/TABLA CNS 1Ba –ROUTERS REGIONAL PLAN / PLAN REGIONAL DE ENCAMINADORES
REGION CAR/ CAR REGION

Administration and Location/ Administración y Localidad	Type of Router / Tipo de Encaminador	Type of Interconnection / Tipo de interconexión	Connected Router-Encaminador Conectado	Link Speed-Velocidad del enlace	Link Protocol-Protocolo del Enlace	Via Vía	Target Date / Fecha Meta	Remarks Observaciones
1	2	3	4	5	6	7	8	9
Anguilla	IP	Intra Regional	Trinidad and Tobago (Piarco)	TBD	IPv4	Eastern Caribbean Network	TBD	
Antigua	IP	Intra Regional	Trinidad and Tobago (Piarco)	TBD	IPv4	Eastern Caribbean Network	TBD	
Aruba	IP	Intra Regional	Jamaica (Kingston), Curacao	TBD	IPv4	MEVA	TBD	
Bahamas/Nassau	IP	Intra Regional	Haiti (Port –of-Prince), USA (Miami)	TBD	IPv4	MEVA	TBD	
Barbados	IP	Intra Regional	Trinidad and Tobago (Piarco)	TBD	IPv4	Eastern Caribbean Network	TBD	
Belice/Belice	IP	Intra Regional	Honduras – COCESNA (Tegucigalpa)	TBD	IPv4	CAMSAT	2008	
British Virgin Islands (Tortola)	IP	Intra Regional	USA (Miami)	TBD	IPv4	MEVA	TBD	
Cayman I.	IP	Intra Regional	Jamaica (Kingston), Cuba (La Habana)	TBD	IPv4	MEVA	TBD	
Costa Rica/San José	IP	Intra Regional	Honduras – COCESNA (Tegucigalpa)	TBD	IPv4	CAMSAT	2008	
Cuba/La Habana	IP	Intra Regional	Haiti (Port –of-Prince), USA (Miami), Jamaica (Kingston), Cayman I., Honduras – COCESNA (Tegucigalpa)	TBD	IPv4	MEVA	TBD	
			Mexico	TBD	IPv4	TBD	TBD	
Curacao	IP	Intra Regional	Aruba, Dominican Republic (Sto. Domingo), Haiti (Port of Prince), Jamaica (Kingston), Puerto Rico (San Juan)	TBD	IPv4	MEVA	TBD	
Dominican Republic/ Sto. Domingo	IP	Intra Regional	Haiti (Port of Prince), Puerto Rico (San Juan), Curacao / Miami	TBD	IPv4	MEVA	TBD	

Administration and Location/ Administración y Localidad	Type of Router / Tipo de Encaminador	Type of Interconnection / Tipo de interconexión	Connected Router- Encaminador Conectado	Link Speed- Velocidad del enlace	Link Protocol- Protocolo del Enlace	Via Vía	Target Date / Fecha Meta	Remarks Observaciones
1	2	3	4	5	6	7	8	9
El Salvador/San Salvador	IP	Intra Regional	Honduras – COCESNA (Tegucigalpa)	TBD	IPv4	CAMSAT	2008	
French Antilles (Martinique)/ Fort-au-France	IP	Intra Regional	Trinidad and Tobago (Piarco)	TBD	IPv4	Eastern Caribbean Network	TBD	
French Antilles (Guadalupe)/ Point-a Pitre	IP	Intra Regional	Trinidad and Tobago (Piarco)	TBD	IPv4	Eastern Caribbean Network	TBD	
Grenada	IP	Intra Regional	Trinidad and Tobago (Piarco)	TBD	IPv4	Eastern Caribbean Network	TBD	
Guatemala/La Aurora	IP	Intra Regional	Honduras – COCESNA (Tegucigalpa)	TBD	IPv4	CAMSAT	2008	
Haiti/Port au Prince	IP	Intra Regional	Bahamas, Cuba (La Habana), Curacao, Dominican Republic (Sto. Domingo), Jamaica (Kingston)	TBD	IPv4	MEVA	TBD	
Honduras/Tegucigalpa COCESNA	IP	Intra Regional	Belice (Belice), Costa Rica (San Jose), Guatemala (La Aurora), Honduras (San Pedro Sula), Nicaragua (Managua),	TBD	IPv4	CAMSAT	2008	
		Inter/ Intra Regional	Cuba (La Habana), NAM (Atlanta), Panama, USA (Miami)	TBD	IPv4	MEVA	TBD	
		Intra Regional	Mexico	TBD	IPv4	TBD	TBD	
Honduras/ San Pedro Sula	IP	Intra Regional	Honduras – COCESNA (Tegucigalpa)	TBD	IPv4	CAMSAT	2008	
Jamaica/Kingston	IP	Intra Regional	Aruba, Cayman I., Cuba (La Habana), Curacao, Haiti (Port of Prince).	TBD	IPv4	MEVA	TBD	
Mexico	IP	Inter/ Intra Regional	Cuba (La Habana), Honduras (Tegucigalpa), NAM (Atlanta),	TBD	IPv4	TBD	TBD	
Monserrat	IP	Intra Regional	Trinidad and Tobago (Piarco)	TBD	IPv4	Eastern Caribbean Network	TBD	

Administration and Location/ Administración y Localidad	Type of Router / Tipo de Encaminador	Type of Interconnection / Tipo de interconexión	Connected Router-Encaminador Conectado	Link Speed-Velocidad del enlace	Link Protocol-Protocolo del Enlace	Via Vía	Target Date / Fecha Meta	Remarks Observaciones
1	2	3	4	5	6	7	8	9
Nicaragua Managua	IP	Intra Regional	Honduras – COCESNA (Tegucigalpa)	TBD	IPv4	CAMSAT	2008	
Puerto Rico/San Juan	IP	Inter/ Intra Regional	Curacao, Dominican Republic (Sto. Domingo), USA (Miami).	TBD	IPv4	MEVA	TBD	
			SAM (Caracas), Trinidad and Tobago (Piarco)	TBD	IPv4	TBD	TBD	
St. Kitts & Nives	IP	Intra Regional	Trinidad and Tobago (Piarco)	TBD	IPv4	Eastern Caribbean Network	TBD	
St. Lucia	IP	Intra Regional	Trinidad and Tobago (Piarco)	TBD	IPv4	Eastern Caribbean Network	TBD	
St Marteen	IP	Intra Regional	USA (Miami)	TBD	IPv4	MEVA	TBD	
St. Vincent	IP	Intra Regional	Trinidad and Tobago (Piarco)	TBD	IPv4	Eastern Caribbean Network	TBD	
Turks & Caicos/Grand Turk	IP	Intra Regional	USA (Miami)	TBD	IPv4	MEVA	TBD	
Trinidad and Tobago/Piarco	IP	Intra Regional	Angula, Antigua, Barbados, French Antilles (Fort-au-France, Point-a-Pitre), Grenada, Monserrat, St. Kitts & Nives, St. Lucia, St. Vincent	TBD	IPv4	Eastern Caribbean Network	TBD	
		Intra Regional	Puerto Rico (San Juan)	TBD	IPv4	TBD	TBD	
		Inter Regional	EUR (Madrid),	TBD	IPv4	TBD	TBD	
		Inter Regional	SAM (Caracas)	TBD	IPv4	REDDIG	TBD	

APPENDIX I

TABLE/TABLA CNS 1Ba –ROUTERS REGIONAL PLAN / PLAN REGIONAL DE ENCAMINADOTES
SAM REGION / REGIÓN SAM

Administration and Location/ Administración y Localidad	Type of Router / Tipo de Encaminador	Type of Interconnection/ Tipo de interconexión	Connected Router- Encaminador Conectado	Link Speed- Velocidad del enlace	Link Protocol- Protocolo del Enlace	Via Vía	Target Date / Fecha Meta	Remarks Observaciones
1	2	3	4	5		7	8	9
Argentina/Buenos Aires	IP	Inter/Intra Regional	AFI (Johannesburgo), Bolivia (La Paz), Chile (Santiago), Brazil (Brasilia), Paraguay (Asunción), Perú (Lima), and/y Uruguay (Montevideo)	TBD	IPv4	CAFSAT REDDIG	2008	
Bolivia/La Paz	IP	Intra Regional	Argentina (Buenos Aires), Brazil (Brasilia) and/y Perú (Lima)	TBD	IPv4	REDDIG	2010	
Brazil/Manaus	IP	Intra Regional	Colombia (Bogotá), Guyana (Georgetown), Guyana Francesa (Cayena), Perú (Lima), Surinam(Paramaribo), and/y Venezuela (Caracas)	TBD	IPv4	REDDIG	2009	
Brazil/Brasilia	IP	Inter/Intra Regional	AFI (Dakar),EUR(Madrid) NAM (Atlanta) via Colombia (Bogotá), Argentina (Buenos Aires), Bolivia (La Paz), Paraguay (Asunción), and/y Uruguay (Montevideo)	TBD	IPv4	CAFSAT REDDIG	2009	
Chile/Santiago	IP	Inter/Intra Regional	PAC (Christchurch), Argentina (Buenos Aires) and/y Perú (Lima)	TBD	IPv4	PTT REDDIG	2008	
Colombia/Bogotá	IP	Inter/Intra Regional	NAM (Atlanta)*, Ecuador (Guayaquil), Brazil (Manaus); Perú (Lima); and/y Venezuela (Caracas)	TBD	IPv4	MEVA II Interconnection*/ Interconexión MEVA II REDDIG* REDDIG	2009	
Ecuador/Guayaquil	IP	Intra Regional	Colombia (Bogotá), Perú (Lima), and/y Venezuela (Caracas)	TBD	IPv4	REDDIG	2010	

Administration and Location/ Administración y Localidad	Type of Router / Tipo de Encaminador	Type of Interconnection/ Tipo de interconexión	Connected Router- Encaminador Conectado	Link Speed- Velocidad del enlace	Link Protocol- Protocolo del Enlace	Via Vía	Target Date / Fecha Meta	Remarks Observaciones
1	2	3	4	5		7	8	9
French Guiana/Cayenne Guyana Francesa/ Cayena	IP	Intra Regional	Brazil (Manaus), and/y Surinam (Paramaribo)	TBD	IPv4	REDDIG	2010	
Guyana/Georgetown	IP	Inter/Intra Regional	C-CAR (Piarco), Brazil (Manaos), Surinam(Paramaribo) and/y Venezuela(Caracas)	TBD	IPv4	REDDIG	2010	
Panamá/Panamá	IP	Inter/Intra Regional	NAM (Atlanta) Colombia (Bogota)	TBD	IPv4	MEVA II MEVA II Interconnection/ Interconexión MEVAII REDDIG	2010	
Paraguay/Asunción	IP	Intra Regional	Argentina (Buenos Aires), and/y Brazil (Brasilia)	TBD	IPv4	REDDIG	2008	
Perú/Lima	IP	Inter/Intra Regional	NAM(Atlanta), Argentina (Buenos Aires), Bolivia (La Paz), Brazil (Manaos), Chile(Santiago), Colombia (Bogotá), Ecuador (Guayaquil and/y Venezuela (Caracas)	TBD	IPv4	REDDIG	2009	
Suriname/Paramaribo	IP	Inter Regional	Brazil (Manaos), Guyana Francesa (Cayena) and/y Venezuela (Caracas)	TBD	IPv4	REDDIG	2010	
Uruguay/Montevideo	IP	Intra Regional	Argentina (Buenos Aires) and/y Brazil (Brasilia)	TBD	IPv4	REDDIG	2010	
Venezuela/Caracas	IP	Inter/Intra Regional	CAM (San Juan), EUR(Madrid), Brazil (Manaus), Colombia (Bogotá), Ecuador (Quito), Guyana (Georgetown), Suriname (Paramaribo) and/y Trinidad&Tobago (Piarco)	TBD	IPv4	MEVA II Interconnection/ Interconexión MEVAII REDDIG PTT REDDIG	2009	

APPENDIX J

TABLE CNS 1BB – ATN GROUND-GROUND APPLICATIONS PLAN / TABLA CNS1 B – PLAN DE APLICACIONES TIERRA-TIERRA ATN (CAR REGION / REGIÓN CAR)

ATN GROUND-GROUND APPLICATIONS PLAN / PLAN DE APLICACIONES TIERRA-TIERRA					
Administration and Location / Administración y localidad	**Application Type / Tipo de Aplicación**	**Connected with Administration & Location of / Conectada con Administración y Localidad de**	**Used Standard / Norma usada**	**Implementation Date / Fecha de Implementación**	**Remarks/ Observaciones**
1	**2**	**3**	**4**	**5**	**6**
ARUBA, Aruba	AMHS	FAA-Atlanta	IPS	TBD	
BAHAMAS, Nassau,	AMHS	FAA-Atlanta	IPS	TBD	
CAYMAN ISLANDS, Grand Cayman ISLAS CAIMANES , Gran Caimán	AMHS	FAA-Atlanta	IPS	TBD	
CUBA, Havana CUBA, La Habana	AMHS	FAA-Atlanta	IPS	2009	
	AIDC	TBD	TBD	TBD	
DOMINICAN REPUBLIC, Santo Domingo/ REPÚBLICA DOMINICANA, Santo Domingo	AMHS	FAA-Atlanta	IPS	2008	
	AIDC	TBD	TBD	TBD	
HAITI, Port-au-Prince/ HAITÍ, Puerto Príncipe	AMHS	FAA-Atlanta	IPS	2009	
HONDURAS, Tegucigalpa (COCESNA)	AMHS	FAA-Atlanta	IPS	2008	
	AIDC	TBD	TBD	TBD	
JAMAICA, Kingston	AMHS	FAA-Atlanta	IPS	2008	
	AIDC	TBD	IPS	TBD	
MEXICO, Mexico City MÉXICO, Ciudad de México	AMHS	FAA-Atlanta	IPS	TBD	
	AIDC	FAA- TBD	TBD	TBD	
	AIDC	TBD	TBD	TBD	

ATN GROUND-GROUND APPLICATIONS PLAN / PLAN DE APLICACIONES TIERRA-TIERRA					
Administration and Location / Administración y localidad	**Application Type / Tipo de Aplicación**	**Connected with Administration & Location of / Conectada con Administración y Localidad de**	**Used Standard / Norma usada**	**Implementation Date / Fecha de Implementación**	**Remarks/ Observaciones**
1	**2**	**3**	**4**	**5**	**6**
NETHERLANDS ANTILLES (Curacao) / ANTILLAS NEERLANDESAS (Curazao)	AMHS	FAA-Atlanta	IPS	TBD	
TRINIDAD AND TOBAGO, Piarco	AMHS	FAA-Atlanta	IPS	TBD	
	AIDC	TBD	TBD	TBD	
UNITED STATES, Atlanta ESTADOS UNIDOS, Atlanta	AMHS	Aruba	IPS	TBD	03 2007 - USA Availability to connect to the CAR/SAM Regions/ Disponibilidad de conectar con las Regiones CAR/SAM
	AMHS	Bahamas Nassau	IPS	TBD	
	AMHS	Cayman Islands, Grand Cayman Islas Caimanes , Gran Caimán	IPS	TBD	
	AMHS	Cuba, Havana Cuba, La Habana	IPS	2009	
	AMHS	Dominican Republic, Santo Domingo/ República Dominicana, Santo Domingo	IPS	2008	
	AMHS	Haiti, Port-au-Prince/ Haití, Puerto Príncipe	IPS	2008	
	AMHS	Honduras, Tegucigalpa (COCESNA)	IPS	2008	
	AMHS	Jamaica, Kingston	IPS	2008	
	AMHS	Mexico, Mexico	IPS	TBD	
	AMHS	Netherlands Antilles (Curacao) / Antillas Neerlandesas (Curazao)	IPS	TBD	
	AMHS	Panama, Panama City/ Panamá, Ciudad de Panamá	IPS	TBD	
	AMHS	Peru, Lima	IPS	TBD	

ATN GROUND-GROUND APPLICATIONS PLAN / PLAN DE APLICACIONES TIERRA-TIERRA					
Administration and Location / Administración y localidad	**Application Type / Tipo de Aplicación**	**Connected with Administration & Location of / Conectada con Administración y Localidad de**	**Used Standard / Norma usada**	**Implementation Date / Fecha de Implementación**	**Remarks/ Observaciones**
1	**2**	**3**	**4**	**5**	**6**
	AMHS	Trinidad and Tobago, Piarco	IPS	2009	
	AMHS	Venezuela, Maiquetía	IPS	2009	
UNITED STATES, TBD ESTADOS UNIDOS, Por determinar	AIDC	MEXICO, TBD	TBD	TBD	
	AIDC	TBD	TBD	TBD	

APPENDIX K

TABLE CNS 1BB –GROUND-GROUND APPLICATIONS PLAN / TABLA CNS1 BB – PLAN DE APLICACIONES TIERRA-TIERRA SAM REGION / REGIÓN SAM

ATN GROUND-GROUND APPLICATIONS PLAN / PLAN DE APLICACIONES TIERRA-TIERRA					
Administration and Location/ Administración y localidad	**Application Type/ Tipo de Aplicación**	**Conneted with Administration & Location of/ Conectada con Administración y Localidad de.**	**Used Standard / Norma usada**	**Implementation Date/ Fecha de Implementación**	**Remarks/ Observaciones**
1	2	3	4	5	6
Argentina, Buenos Aires	AMHS	Bolivia, Brazil, Chile, Paraguay Perú, Uruguay and/y AFI	IPS	2005	
	AIDC	Bolivia, Brazil, Chile, Paraguay Perú, Uruguay and/y AFI	IPS	TBD / Por determinar	
Bolivia , La Paz	AMHS	Argentina , Brazil and/y Perú	IPS	2010	
	AIDC	Argentina , Brazil and/y Perú	IPS	TBD / Por determinar	
Brazil, Brasilia	AMHS	Argentina, Bolivia, Paraguay, Uruguay, NAM, EUR, AFI	IPS	2008	
	AIDC	Argentina, Bolivia, Paraguay, Uruguay, NAM, EUR, AFI	IPS	TBD/ Por determinar	
Brazil, Manaus	AMHS	Colombia, Guyana, Guyana Francesa, Peru, Surinam and/y Venezuela	IPS	2008	
	AIDC	Colombia, Guyana, Guyana Francesa, Perú Surinam and/y Venezuela	IPS	TBD/ Por determinar	
Chile, Santiago	AMHS	Argentina, Perú and/y PAC	IPS	2009	
	AIDC	Argentina, Perú and/y PAC	IPS	TBD/ Por determinar	
Colombia , Bogotá	AMHS	Brazil, Ecuador, Perú and/y Venezuela	IPS	2008	
	AIDC	Brazil, Ecuador, Perú and/y Venezuela	IPS	TBD/ Por determinar	
Ecuador ,Quito	AMHS	Colombia, Perú and/y Venezuela	IPS	2009	
	AIDC	Colombia, Perú and/y Venezuela	IPS	TBD/ Por determinar	
French Guiana,, Cayenne Guyana Francesa, Cayena	AMHS	Brazil, Surinam and/y Venezuela	IPS	2009	
	AIDC	Brazil, Surinam and/y Venezuela	IPS	TBD/ Por determinar	
Guyana, Georgetown	AMHS	Brazil, Trinidad Tobago and/y Venezuela	IPS	2009	
	AIDC	Brazil, Trinidad Tobago and/y Venezuela	IPS	TBD/ Por determinar	
Panamá, Panamá	AMHS	Colombia, NAM	IPS	2008	
	AIDC	Colombia, NAM	IPS	TBD/ Por determinar	
Paraguay, Asunción	AMHS	Argentina, Brazil	IPS	2007	
	AIDC	Argentina, Brazil	IPS	TBD/ Por determinar	
Perú, Lima	AMHS	Argentina, Bolivia, Brazil, Chile Colombia, Ecuador, Venezuela and/y NAM	IPS	2007	
	AIDC	Argentina, Bolivia, Brazil, Chile Colombia, Ecuador Venezuela and/y NAM	IPS	TBD/ Por determinar	
Suriname, Paramaribo	AMHS	Brazil, French Guyana and/y Venezuela	IPS	2009	
	AIDC	Brazil, French Guyana and/y Venezuela	IPS	TBD/ Por determinar	

ATN GROUND-GROUND APPLICATIONS PLAN / PLAN DE APLICACIONES TIERRA-TIERRA					
Administration and Location/ Administración y localidad	**Application Type/ Tipo de Aplicación**	**Conneted with Administration & Location of/ Conectada con Administración y Localidad de.**	**Used Standard / Norma usada**	**Implementation Date/ Fecha de Implementación**	**Remarks/ Observaciones**
1	2	3	4	5	6
Uruguay, Montevideo	AMHS	Argentina, Brazil	IPS	2008	
	AIDC	Argentina, Brazil	IPS	TBD/ Por determinar	
Venezuela, Caracas	AMHS	Brazil, Colombia, Ecuador, Guyana, Guyana Francesa , Perú, Suriname, NAM, CAR and/y EUR	IPS	2008	
	AIDC	Brazil, Colombia, Ecuador Guyana, Guyana Francesa , Perú, Suriname, NAM, CAR and/y EUR	IPS	TBD/ Por determinar	

APPENDIX L

IP ADDRESS PLAN (IPv4)

The IP address structure (Private IPv4) to be adopted in the CAR/SAM Region was the following:

1st BYTE	2nd BYTE		3th BYTE		4th BYTE
8 bits	4 bits	4 bits	4 bits	4 bits	8 bits
00001010	Region	State		Host	

The structure has as a first byte the fixed value of 10 in decimal number
The rest of 24 bits (3 bytes) have the following distribution, part of the 2nd byte should be used for identification of Regions; and part of the 3rd bytes should be used for State identification. The 4th and part of the 3rd byte should be used for hosts

The address structure has the following codification :

10.XXXX YYYY.YYYYZZZZ.ZZZZZZZZ
Sub mask 255.255.240.0
X= Region (16 regions allowed)
Y= States/Territories (256 States /Territories allowed)
Z= host (4096 hosts allowed)

APPENDIX M

AMHS MD REGISTER FOR CAR/NAM REGIONS / REGISTRO AMHS MD PARA LAS REGIONES CAR/NAM

http://www.icao.int/anb/panels/acp/amhs

STATE / ESTADO		AMHS ADDRESS SPECIFICATION /					
NATIONALITY LETTERS / LETRAS NACIONALIDAD	NAME / NOMBRE	STATE NAME / NOMBRE ESTADO (C)	ADMD NAME / NOMBRE ADMD (A)	PRMD NAME / NOMBRE PRMD (P)	ADDRESSING SCHEME / ESQUEMA DE DIRECCIONAMIENTO	ORGANIZATION NAME / NOMBRE ORGANIZACIÓN (O)	REMARKS/ OBSERVACIONES
TQ	Anguilla (U.K.)	XX	ICAO	TQ	XF	AFTN	
TA	Antigua and Barbuda	XX	ICAO	TA	XF	AFTN	
TB	Barbados	XX	ICAO	TB	CAAS	AFTN	State letter confirmed/Carta confirmación Estado
TU	British Virgin Islands (U.K.)	XX	ICAO	TU	XF	AFTN	
TF	French Antilles	XX	ICAO	TF	XF	AFTN	State letter confirmed/Carta confirmación Estado
TG	Grenada	XX	ICAO	TG	XF	AFTN	
TR	Montserrat (U.K.)	XX	ICAO	TR	XF	AFTN	
TK	Saint Kitts and Nevis	XX	ICAO	TK	XF	AFTN	
TL	Saint Lucia	XX	ICAO	TL	XF	AFTN	
TD	Dominica	XX	ICAO	TD	XF	AFTN	
TV	Saint Vincent and the Grenadines	XX	ICAO	TV	XF	AFTN	
TT	Trinidad and Tobago	XX	ICAO	TT	XF	AFTN	
TN	Netherlands Antilles	XX	ICAO	TN	XF	AFTN	
TNCA	Aruba	XX	ICAO	TNCA	XF	AFTN	
MY	Bahamas	XX	ICAO	MY	XF	AFTN	
MU	Cuba	XX	ICAO	MU	CAAS	MU	State letter confirmed/Carta confirmación Estado
MT	Haiti	XX	ICAO	MT	XF	AFTN	
MW	Cayman Islands (U.K.)	XX	ICAO	MW	XF	AFTN	
MB	Turks and Caicos Islands (U.K.)	XX	ICAO	MB	XF	AFTN	
MK	Jamaica	XX	ICAO	MK	XF	AFTN	
MD	Dominican Republic	XX	ICAO	MD	XF	AFTN	
TI	Virgin Islands	XX	ICAO	TI	XF	AFTN	

STATE / ESTADO		AMHS ADDRESS SPECIFICATION /					
NATIONALITY LETTERS / LETRAS NACIONALIDAD	**NAME / NOMBRE**	**STATE NAME / NOMBRE ESTADO (C)**	**ADMD NAME / NOMBRE ADMD (A)**	**PRMD NAME / NOMBRE PRMD (P)**	**ADDRESSING SCHEME / ESQUEMA DE DIRECCIONAMIENTO**	**ORGANIZATION NAME / NOMBRE ORGANIZACIÓN (O)**	**REMARKS/ OBSERVACIONES**
	(U.S.)						
MZ	Belize	XX	ICAO	MZ	XF	AFTN	
MR	Costa Rica	XX	ICAO	MR	XF	AFTN	
MS	El Salvador	XX	ICAO	MS	XF	AFTN	
MG	Guatemala	XX	ICAO	MG	XF	AFTN	
MH	Honduras	XX	ICAO	MH	XF	AFTN	
MN	Nicaragua	XX	ICAO	MN	XF	AFTN	
MM	Mexico	XX	ICAO	MM	CAAS	MM	State letter confirmed/Carta confirmación Estado
TX	Bermuda (U.K.)	XX	ICAO	TX	XF	AFTN	
TJ	Puerto Rico	XX	ICAO	TJ	XF	AFTN	
C*	Canada	XX	ICAO	C	XF	AFTN	
K*	United States	XX	ICAO	USA	CAAS		State letter confirmed/Carta confirmación Estado

Date/Fecha: 25 March 2008 / 25 de marzo de 2008

PROPOSED AMHS MD REGISTER FOR SAM REGION / REGISTRO AMHS MD PARA LAS REGIONES SAM PROPUESTO

STATE/ ESTADO	AMHS ADDRESSING SPECIFICATIONS / ESPECIFICACIONES DE DIRECCIONAMIENTO AMHS					
	STATE NAME/ NOMBRE ESTADO (C)	ADMD NAME/ NOMBRE ADMD (A)	PROMD NAME/ NOMBRE PRMD (P)	ORGANIZATION NAME/ NOMBRE ORGANIZACIÓN (O)	ORGANIZATIONAL UNIT NAME/ NOMBRE UNIDAD ORGANIZACIONAL (OUI)	COMMON NAME/ NOMBRE COMUN (CN)
ARGENTINA	XX	ICAO	ARGENTINA	SAEZ	Todas las cuatro letras indicadas en el Documento 7910 de la OACI	User AFTN address (8 letter)/ Dirección AFTN (8 letras) de usuario
BOLIVIA	XX	ICAO	BOLIVIA	SLLF	Id	Id
BRAZIL	XX	ICAO	BRASIL	SBBF	Id	Id
CHILE	XX	ICAO	CHILE	SCEZ	Id	Id
COLOMBIA	XX	ICAO	COLOMBIA	SKED	Id	Id
ECUADOR	XX	ICAO	ECUADOR	SEGU	Id	Id
FRENCH GUIANA/GUYANA FRANCESA	XX	ICAO	GUYANA FRANCESA	SOCA	Id	Id
GUYANA	XX	ICAO	GUYANA	SYCJ	Id	Id
PANAMA	XX	ICAO	PANAMA	MPTO	Id	Id
PARAGUAY	XX	ICAO	PARAGUAY	SGAS	Id	Id
PERU	XX	ICAO	PERU	SPLI	Id	Id
SURINAME	XX	ICAO	SURINAME	SMPM	Id	Id
URUGUAY	XX	ICAO	URUGUAY	SUEO	Id	Id
VENEZUELA	XX	ICAO	VENEZUELA	SVZM	Id	Id

APPENDIX N

TABLE CNS 3 / TABLA CNS 3

TABLE OF RADIO NAVIGATION AIDS / TABLA DE AYUDAS PARA LA RADIONAVEGACIÓN

EXPLANATION OF THE TABLE

Column

1 Name of the country, city and aerodrome and, for route aids, the location of the installation.

2 The designator number and runway type:

NINST Visual flight runway
NPA Non precision approach runway
PA1 Precision approach runway, Category I
PA2 Precision approach runway, Category II
PA3 Precision approach runway, Category III

3 The functions carried out by the aids appear in columns 4 to 8 and 10 to 12.

A/L Approach and landing
T Terminal
E En route

4 ILS Instrument landing system. Roman numerals I, II and III indicate the acting category of the ILS I, II or III. (I) indicates that the facility is implemented.

The letter "D" indicates a DME requirement to serve as a substitute for a marker beacon component of an ILS.

Note. Indication of the category refers to the performance standard to be achieved and maintained, in accordance with pertinent specifications in ICAO Annex 10, and not to specifications of the ILS equipment, since both specifications are not necessarily the same.

An asterisk (*) indicates that the ILS requires a Category II signal, but without the reliability and availability which redundant equipment and automatic switching provide.

5 Radio beacon localizer, be it associated with an ILS or to be used as an approach aid at an aerodrome.

6 Radiotelemetrical equipment. When an "X" appears in column 6 in line with the VOR in column 7, this indicates the need that the DME be installed at a common site with the VOR.

7 VOR VHF omnidirectional radio range.

8 NDB Non-directional radio beacon.

9 The distances and altitude to which the VOR or VOR/DME signals are required, indicated in nautical miles (NM) or thousands of feet, or the nominal coverage recommended of the NDB, indicated in nautical miles.

10, 11, 12 GNSS global navigation satellite system (includes ABAS, GBAS and SBAS).

ABAS (aircraft based augmentation system) implementation planned to be used for route navigation, for terminal and for non precision approach. Filling this column indicates when navigation services are allowed through the single use of, GPS + RAIM or GPS +RAIM with any other onboard supporting equipment.

GBAS (ground-based augmentation system) implementation planned to be used in precision approach and landing CAT I, CAT II, CAT III.

SBAS (satellite-based augmentation system) implementation planned to be used for route navigation, for terminal, for non precision approach, non precision approach with vertical guidance and landing. An "X" indicates service availability; exact location of installation will be determined.

13 Remarks

Note. Columns 5 to 12 use the following symbols:

D DME required but not implemented.
DI DME required and implemented.
X Required but not implemented.
XI Required and implemented.

EXPLICACIÓN DE LA TABLA

Columna

1 Nombre del país, ciudad y aeródromo y, para las ayudas en ruta, el emplazamiento de la instalación.

2 Número de designador y tipo de pista:

NINST Pista de vuelo visual
NPA Pista de aproximación que no es de precisión
PA1 Pista de aproximación de precisión, Categoría I
PA2 Pista de aproximación de precisión, Categoría II
PA3 Pista de aproximación de precisión, Categoría III

3 La función efectuada por las ayudas figura en las Columnas 4 a 8 y 10 a 12.

A/L Aproximación y aterrizaje
T Terminal
E En ruta

4 ILS Sistema de aterrizaje por instrumentos. Los números romanos I, II y III indican la categoría de actuación del ILS, I, II o III. (I) indican que la instalación está en servicio.

La letra “D” indica que se requiere un DME para sustituir a un componente de radiobaliza de un ILS.

Nota. La indicación de la categoría se refiere a la norma de performance que ha de alcanzarse y mantenerse, de conformidad con las especificaciones pertinentes del Anexo 10 de la OACI, y no con las especificaciones del equipo ILS, ya que ambas especificaciones no son necesariamente las mismas.

Un asterisco (*) indica que el ILS requiere una señal de Categoría II, pero sin la fiabilidad y disponibilidad que proporcionan el equipo de reserva y la conmutación automática.

5 Localizador de radiofaro, asociado a un ILS o para utilizarlo como ayuda de aproximación en un aeródromo.

6 Equipo radiotelemétrico. Cuando figura una AX@ en la Columna 6 junto con el VOR de la Columna 7, quiere decir que el DME debe instalarse en un sitio común con el VOR.

7 VOR Radiofaro omnidireccional en VHF.

8 NDB Radiofaro no direccional.

9 Las distancias y altitud a las cuales se requieren señales VOR o VOR/DME indicadas en millas marinas (NM) o miles de pies, o la cobertura nominal recomendada del NDB indicada en millas marinas.

10, 11, 12 GNSS sistema mundial de navegación por satélite (incluye ABAS, GBAS y SBAS).

ABAS (sistema de aumentación basado en aeronave) según lo previsto, se utilizará en navegación en ruta, terminal, y aproximaciones que no son de precisión. Llenando esta columna indica cuando los servicios de navegación son permitidos a través del uso del GPS + RAIM o GPS + RAIM con cualquier otro sistema de apoyo abordo.

GBAS (sistema de aumentación basado en tierra) según lo previsto se utilizará en las aproximaciones y aterrizajes de precisión de CAT I, CAT II y CAT III.

SBAS (sistema de aumentación basado en satélites) según lo previsto, se utilizará en navegación en ruta, terminal, aproximaciones de no precisión con guiado vertical y aterrizajes que no son de precisión. La X indica disponibilidad de servicio; se determinará el emplazamiento exacto de la instalación.

13 Observaciones

Nota. En las Columnas 5 a 12 se utilizan los símbolos siguientes:

D DME requerido pero no en servicio.
DI DME requerido y en servicio.
X Requerido pero no en servicio.
XI Requerido y en servicio.

TABLE CNS 3 / TABLA CNS 3

TABLE OF RADIO NAVIGATION AIDS / TABLA DE AYUDAS PARA LA RADIONAVEGACIÓN

Station/Territory Estación/Territorio	**Rwy type Tipo de pista**	**Function Función**	**ILS**	**L**	**DME**	**VOR**	**NDB**	**Coverage Cobertura**	**GNSS**			**Remarks Observaciones**
									ABAS	**GBAS**	**SBAS**	
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**

APPENDIX O

REGIONAL DEACTIVATION PLAN OF NDB STATIONS

PLAN REGIONAL PARA DESACTIVACION DE ESTACIONES NDB

CAR REGION/ REGION CAR

Update: 22 September 2008 / 22 septiembre 2008

Administration/Location Administración/ Lugar	Identification/ Identificación	Function/ Función	Deactivation Date/ Fecha de desactivación	Remarks/ Observaciones
1	2	3	4	5
ANGUILLA (United Kingdom) THE VALLEY WALL BLAKE, Anguilla I.	ANG	A/E	2018	NACC/WG/01 Conclusion 1/8
ANTIGUA AND BARBUDA SAINT JOHNS/V.C. Bird, Antigua I.	ANU	A/E	2018	NACC/WG/01 Conclusion 1/8
	ZDX	A/E	2018	NACC/WG/01 Conclusion 1/8
BAHAMAS ALICE TOWN/South Bimini, Bimini I.	ZBB	E	?	
FREEPORT/Intl, Grand Bahama I.	ZFP	AE	?	
GEORGE TOWN/EXUMA Intl,	ZGT	A/L	?	
NASSAU/Intl, New Providence I.	ZQA	AE	?	
BARBADOS				
BRIDGETOWN/Grantley Adams Intl.	BGI	A/E	2005	It will remain serviceable until maintenance support becomes exhaustive. No later than 2018 / Permanecerá en servicio hasta que mantenimiento sea exhaustivo. No más allá de 2018.
BELIZE				
BELIZE/Intl.	BZE	AE	?	
CAYMAN ISLANDS				
CAYMAN BRAC/Gerrard Smith Intl.	CBC	AE	?	

Administration/Location Administración/ Lugar	Identification/ Identificación	Function/ Función	Deactivation Date/ Fecha de desactivación	Remarks/ Observaciones
1	2	3	4	5
GEORGETOWN/Owen Roberts Intl.	ZIY	AE	?	
COSTA RICA				.
COTO 47	COT	AE	?	
LOS CHILES	CHI	E	?	
HORCONES	HOR	AE	?	
PARRITA	PAR	E	?	
CUBA				
CAYABO	UCY	T, E	2010 - 2015	
CAYO LARGO DEL SUR/Vilo Acuña Intl.	UCL	AE	2015 - 2020	
CIEGO DE AVILA/Maximo Gomez Intl.	UCV	A	2015 - 2020	
HOLGUIN/Frank Pais Intl.	UHG	AE	After/Posterior 2020	
NUEVA GERONA	UNG	AE	2015 - 2020	
SANTIAGO DE CUBA/Antonio Maceo	UCU	AE	2015 - 2020	
DOMINICAN REPUBLIC				
BARAHONA/María Montés Intl.	BHN	AE	-	Decomissioned / Desmantelado
HERRERA/Herrera Intl.	HER	AE	-	Decomissioned / Desmantelado
LA ROMANA/La Romana Intl.	LRN	AE	?	
PUERTO PLATA/Gregorio Luperon Intl.	PPA	AE	?	
PUNTA CANA/Punta Cana Intl.	PCA	AE	?	
PUNTA CAUCEDO/SANTO DOMINGO/De las Américas Intl.	HIJ	AE	-	Decomissioned / Desmantelado
GUERRA	LAS	AE	?	Decomissioned / Desmantelado
Higuero	HGR	AE	?	
EL SALVADOR				
SAN SALVADOR/El Salvador Intl.	LAN	A	?	
SAN SALVADOR/Ilopango Intl.	YSX	A	?	
FRENCH ANTILLES (France)				

Administration/Location Administración/ Lugar	Identification/ Identificación	Function/ Función	Deactivation Date/ Fecha de desactivación	Remarks/ Observaciones
1	2	3	4	5
FORT DE FRANCE/Le Lamentin, Martinique	FXF	AE	2018	NACC/WG/01 Conclusion 1/8
FORT DE FRANCE/Le Lamentin, Martinique	FOF	AE	2018	NACC/WG/01 Conclusion 1/8
POINTE-A PITRE/Le Raizet, Guadeloupe	PTP	A	2018	NACC/WG/01 Conclusion 1/8
GRENADA				
SAINT GEORGES/Point Salines	GND	AE	2018	NACC/WG/01 Conclusion 1/8
GUATEMALA				
Mundo Maya/Flores Intl.	TIK	AE	Mar 2011	
GUATEMALA/La Aurora	GUA	T	Jan 2009	
IZTAPA	IZP	A	?	
PUERTO BARRIOS/Puerto Barrios	BAR	AE	Dec 2010	
RABINAL	RBN	E	?	
HAITI				
Port-Au-Prince/Port-Au-Prince Intl.	HHP	AE	-	Decomissioned / Desmantelado
HONDURAS				
COPAN RUINAS	RUI	E	?	
LA CEIBA/Golosón Intl.	LCE	AE	?	
Coxen Hole/ROATAN	ROA	A	?	
SAN PEDRO SULA/La Mesa Intl.	SAP	A	?	
TEGUCIGALPA/Toncontín Intl.	TGU	AE	-	Decomissioned / Desmantelado: COCESNA
	TNT	AE	-	Decomissioned / Desmantelado: COCESNA
PUNTA CASTILLA	CTL	AE	?	
PUERTO LEMPIRA	PLP	E	?	
PICACHO/Tegucigalpa	PIC	E	2008	Decomissioned / Desmantelado: AIP Honduras
JAMAICA				
KINGSTON/Norman Manley Intl.	KIN	AE	20 Nov 06	CAD letter / Carta DGAC: 04 Apr 08
MONTEGO BAY/Sangster Intl.	MBJ	AE	13 Mar 08	CAD letter / Carta DGAC: 04 Apr 08

Administration/Location Administración/ Lugar	Identification/ Identificación	Function/ Función	Deactivation Date/ Fecha de desactivación	Remarks/ Observaciones
1	2	3	4	5
MEXICO				
ACAPULCO/Gral. Juan N. Alvarez Intl.	SMS	E	?	
CHETUMAL/Chetumal Intl.	CTM	A	?	
CHIHUAHUA/Gral. Roberto Fierro Villalobos Intl.	CUW	AE	?	
CHOIX	CHX	E	?	
COZUMEL/Cozumel Intl.	CZL	AE	?	
GUAYMAS/Gral. José Maria Yañez Intl.	GYM	AE	?	
LOS MOCHIS			?	Reccomended / Recomendado
MERIDA/Lic. Manuel Crescencio Rejón Intl. (PROGRESO)	MPG	E	?	
MEXICO/Lic. Benito Juárez Intl.	MW	A	?	
SAN MARCOS	SMC	A	?	
SANTA ANITA		A	?	Reccomended / Recomendado
TAMPICO/Gral. Francisco Javier Mina Intl.	TAM	A	?	
TEPIC		E	?	In project / Proyectado
MONTSERRAT (United Kingdom)				
PLYMOUTH/W.H. Bramble, Montserrat I.	MON	A/L	2018	NACC/WG/01Conclusion 1/8
NETHERLANDS ANTILLES (Netherlands)				
PHILIPSBURG/Prinses Juliana, St. Maarten I.	PJM	AE	?	
WILLEMSTAD/Hato, Curacao I.	PJG	AE	?	
NICARAGUA				
MANAGUA/Augusto César Sandino Intl.	YNP	AE	30 Jun 2007	
PUERTO RICO (United States)				
DORADO	DDP	AE	?	
MAYAQUEZ/Mayaquez	MAZ	A	?	
POINT TUNA	X	E	?	
ROOSEVELT ROADS	NRR	T	?	

Administration/Location Administración/ Lugar	Identification/ Identificación	Function/ Función	Deactivation Date/ Fecha de desactivación	Remarks/ Observaciones
1	2	3	4	5
SAN JUAN DE PUERTO RICO/Luis Muñoz Marín Intl.	L	A	?	
SAN PAT		T	?	
Saint Kitts and Nevis				
Basseterre/ Robert L. BradShaw, St. Kitts Is.	SKB	AE	2018	NACC/WG/01Conclusion 1/8
SAINT LUCIA				
CASTRIES/George F. Charles	SLU	AE	2018	NACC/WG/01Conclusion 1/8
VIEUXFORT/Hewanorra Intl.	BNE	AE	2018	NACC/WG/01Conclusion 1/8
SAINT VINCENT AND THE GRENADINES				
CANOUAN/Canouan Is.	CAI	A	2018	NACC/WG/01Conclusion 1/8
KINGSTOWN/E.T. Joshua	SV	AE	?	NACC/WG/01Conclusion 1/8
MUSTIQUE/ Mustique Intl.				In Project / Proyectado
TRINIDAD AND TOBAGO				
PORT OF SPAIN/Piarco Intl. Trinidad I.	TRI	AE	2018	NACC/WG/01Conclusion 1/8
PIARCO APP/ Galeota	GAL	A	2018	NACC/WG/01Conclusion 1/8
SCARBOROUGH/Crown Point, Tobago I.	TAB	AE	2018	NACC/WG/01Conclusion 1/8
TURKS AND CAICOS ISLANDS (United Kingdom)				
GRAND TURK/Grand Turk Intl.	GT	A	?	
PROVIDENCIALES/Providenciales Intl.	PV	AE	?	
SOUTH CAICOS/South Caicos Intl.	SC	A	?	
VIRGIN ISLANDS (United Kingdom)				
ROADTOWN/Terrance B. Lettsome, Tortola I.	BFI	AE	2018	NACC/WG/01Conclusion 1/8
VIRGIN ISLANDS (United States)				
CHRISTIANSTED/Henry E. Rohlsen,	SX	A	2018	NACC/WG/01Conclusion 1/8

SAM REGION / REGION SAM

Administration/Location Administración/ Lugar	Identification/ Identificación	Function/ Función	Deactivation Date/ Fecha de desactivación	Remarks/ Observaciones
1	2	3	4	5
ARGENTINA				
COMODORO RIVADAVIA/Gral. Mosconi		E		
CORDOBA/Ing. Aer. A. L. Taravella		A/L/T/E	2008	
FORMOSA/Formosa		A/L/T		
GENERAL PICO		E		
JUJUY/Jujuy		A/L/E	2008	
JUNIN		E		
LA PLATA		E		
MALARGUE		E		
MAR DE PLATA/Brig. Gral. B. de la Colina		A/L/T/E		
MENDOZA/El Plumerillo		A/L/T		
NEUQUEN/Presidente Peron		E		
ORAN		E	2008	
POSADAS/Libertador Gral. D. José de San Martín		A/L		
RESISTENCIA/Resistencia		A/L/E		
RIO GALLEGOS/Piloto Civil N. Fernández		A/L/E	2008	
RIO GRANDE/Rio Grande		A/L/E		
SALTA/Salta		A/L		
SAN ANTONIO DE ARECO		E		
SAN CARLOS DE BARILOCHE/San Carlos de Bariloche		A/L/E		
SAN JUAN		E		
TUCUMAN/Tte. Benjamín Matienzo		A/L		
BOLIVIA				
CHARAÑA		E	2017	
COCHABAMBA/Jorge Wilsterman		E	2017	
LA PAZ/El Atlo Intl.		A/L/T/E	2017	
RIBERALTA		E	2017	
ROBORE		E	2017	
SANTA ANA		E	2017	
SANTA CRUZ/Viru Viru		A/L/E	2017	
SUCRE		E	2017	
TARIJA/Oriel Lea Plaza		E	2017	

Administration/Location Administración/ Lugar	Identification/ Identificación	Function/ Función	Deactivation Date/ Fecha de desactivación	Remarks/ Observaciones
1	2	3	4	5
TRINIDAD/Tte. Av. Jorge Henrich Arauz		A/L/E	2017	
YACUIBA		E	2017	
BRAZIL				
ABROLHOS		E		
ALDEIA		T/E		
ALTA FLORESTA	ATF	E	Jan 2012	245Khz
AMAPA	AMP	E	Jan 2019	275Khz
ARACAJU	ACJ	E	Jan 2012	335Khz
BAGE	BGE	E	Jan 2012	235Khz
BARREIRAS	BRR	E	Jan 2012	375Khz
BAURU	BRU	E	Jan 2019	380Khz
BELEM/Val De Caes	BEL	A/L/E	Jan 2012	250Khz
BELO HORIZONTE/Tancredo Neves Intl.	BHZ	A/L/T/E	Jan 2012	520Khz
BOA VISTA/Boa Vista Intl.	BVI	A/L/E	Jan 2012	405Khz
BRASILIA/Brasilia Intl.	BRS	T/E	Jan 2012	340Khz
CAMPO GRANDE/Campo Grande Intl.	IG	A/L/T/E	Jan 2019	395Khz
	CGR		Jan 2019	270Khz
CAMPOS		E		
CARAJÁS		E		
CARAUARI	CUA	E	Jan 2019	285Khz
CARAVELAS	CVL	E	Jan 2012	365Khz
CAROLINA	CNA	E	Jan 2012	330Khz
CAXIAS	CXS	T	Jan 2012	1690Khz
CORUMBÁ/Corumbá Intl.	CUB	A/L/T/E	Jan 2019	375Khz
CRUZEIRO DO SUL/Cruzeiro do Sul Intl.	CZS	A/L/E	Jan 2012	260Khz
CUIABÁ/Marechal Rondom	CIA	A/L/T/E	Jan 2012	380Khz
CURITIBA/Afonso Pena Intl.	PNH	A/L/T/E	Jan 2012	255Khz
FLORIANÓPOLIS/ Hercílio Luz Intl.	BKO	A/L/E	Jan 2019	380Khz
	IL		Jan 2019	350Khz
FORTALEZA/ Pinto Martins	PCI	A/L/E	Jan 2019	210Khz
FOZ DO IGUACU/Cataratas Intl.	QQ	A/L	Jan 2019	395Khz
GABRIEL		E		
GUAJARÁ		E		
ILHEUS	YLH	E	Jan 2019	305 Khz
ITACOATIARA	YTC	E	Jan 2019	320 Khz
JACAREACANGA	JAC	E	Jan 2012	360Khz
LAGES	LJS	E	Jan 2019	240Khz
LAPA		E		
LUZIANIA	LVZ	T	Jan 2012	400Khz
MACAPA/Macapa Intl.	MCP	A/L/E	Jan 2012	215Khz

Administration/Location Administración/ Lugar	Identification/ Identificación	Function/ Función	Deactivation Date/ Fecha de desactivación	Remarks/ Observaciones
1	2	3	4	5
MACEIO	MCO	E	Jan 2012	340Khz
MANAUS/Eduardo Gomes Intl.	PEL	A/L/T	Jan 2062	410Khz
MONTES CLAROS		E		
MOSSORO	MSS	E	Jan 2012	275 Khz
MOZ		E		
NATAL/Augusto Severo Intl.	MXN	A/L/E	Jan 2016	205 Khz
PALMAS	PMS	E	Jan 2012	255 Khz
PARANAGUA	PNG	E	Jan 2019	340 Khz
PARNAIBA	PNB	E	Jan 2019	365 Khz
PAULO AFONSO	PAF	E	Jan 2012	325 Khz
PELOTAS	PTS	E	Jan 2012	340 Khz
PETROLINA	PTL	E	Jan 2012	345 Khz
PIRAI		E		
POCOS	PCL	E	Jan 2019	415 Khz
PONTA PORA/Ponta Pora Intl.		A/L/E		
PORTO ALEGRE/Salgado Filho Intl.	PA	T/E	Jan 2012	315 Khz
	PAG		Jan 2012	330 KhZ
RECIFE /Guararapes	VSA	A/L/E	Jan 2012	285 Khz
RIO BRANCO	RBC	E	Jan 2012	355 Khz
RIO DE JANEIRO/Galeão Antônio Carlos Jobim Intl.	YLA	A/L	Jan 2014	330 Khz
RONDONIA		E		
SALVADOR/Deputado Luis Eduardo Magalhaes	SVD	A/L/T	Jan 2012	275 Khz
SANTAREM/Santarem Intl.	STM	A/L/T/E	Jan 2012	350 Khz
SAO LUIS/ Marechal Cunha Machado	SLI	A/L/T/E	Jan 2012	280 Khz
TABATINGA/Tabatinga Intl.		A/L/T		
TEFE	TFE	E	Jan 2012	300 Khz
UBERABA		E		
URUBUPUNGA	URP	E	Jan 2012	335 Khz
URUBURETAMA	URT	E	Jan 2014	235 Khz
URUGUAIANA/ Rubem Berta Intl.		A/L/T		
CHILE				
ARICA/Chaculluta		A/L		
BALMACEDA	BAL	E	Dec 2018	390 Khz
CALAMA	CFL	E	Dec 2018	215 Khz
CALDERA	CLD	E	Under study / En estudio	227 Khz
CHAITEN	TEN	E	Dec 2018	234 Khz
CHILLAN	CHI	E	Dec 2012	411 Khz
CONCEPCION/Carriel Sur	CE	T/E	Dec 2018	254 Khz
CURICO	ICO	E	Dec 2008	270 Khz

Administration/Location Administración/ Lugar	Identification/ Identificación	Function/ Función	Deactivation Date/ Fecha de desactivación	Remarks/ Observaciones
1	2	3	4	5
ISLA REY JORGE	IRJ	E	Under study / En estudio	360 Khz
IQUIQUE/Gral. Diego Aracena	R	A/L	Under study/ En estudio	368 Khz
PUERTO AGUIRRE	PAR	E		Decomissioned / Desmantelado
PUERTO MONTT/El Tepual	MO	E	Dec 2008	325 Khz
PUNTA ARENAS/Presidente Cabo Ibañez del Campo	NAS	T/E	Under study / En estudio	270 Khz
SANTIAGO/Arturo Merino Benitez	UE	E	Dec 2019	220 Khz
SANTO DOMINGO	SNO	E	Under study / En estudio	355 Khz
TABON	TBN	E		Decomissioned / Desmantelado
TONGOY	TOY	E	Under study / En estudio	260 Khz
COLOMBIA				
ABEJORRAL		E		
AMBALEMA		E		
BARRANCA BERMEJA		E		
BARRANQUILLA/Ernesto Cortissoz		A/L/E		
SANTAFE DE BOGOTA/Eldorado		A/L/T/E		
BUCARAMANGA		E		
BUENAVENTURA	BUN	E	2005	Replaced by VOR/DME Reemplazado por VOR/DME
CALI/Alfonso Bonilla Aragón	CLO	T/E	2008	Replaced by VOR/DME Reemplazado por VOR/DME
CARTAGENA/Rafael Nuñez		A/L		
LETICIA/Alfredo Vasquez Cobo	LET	A/L/E	2009-2018	
MERCADERES	MER	E	1997	Replaced by VOR/DME Reemplazado por VOR/DME
MITU		E		
PEREIRA		E		
RIO HACHA		E		
SAN ANDRES /Gustavo Rojas Pinilla		A/L/T/E		
SAN JOSE DEL GUAVIARE		E		
TECHO	TEH	E	2006	Replaced by VOR/DME Reemplazado por VOR/DME
TULUA		E		
TUMACO	TCO	E	2007	Replaced by VOR/DME Reemplazado por VOR/DME
VILLAVICENCIO		E		
ZIPAQUIRA		E		

Administration/Location Administración/ Lugar	Identification/ Identificación	Function/ Función	Deactivation Date/ Fecha de desactivación	Remarks/ Observaciones
1	2	3	4	5
ECUADOR				
AZCAZUBI		T		
CHONGON		T		
CUENCA		E		
ESMERALDAS		E		
LATACUNGA/Cotopaxi Intl		A/L		
PALMA		T		
FRENCH GUIANA (France)				
CAYENNE/Rochambeau		A/L/E		
GUYANA				
TIMEHRI/Cheddi Japan Intl.		A/L/E		Decomissioned / Desmantelado
KATA		T/E		Decomissioned / Desmantelado
PANAMA				
DAVID/Enrique Malek	DAV	A/L	Dec 2010	
PANAMA/Tocumen Intl.	NAT	A/L	Dec 2012	
TABOGA	TBG	E	Dec 2009	
WANNKANDI		E		
PARAGUAY				
ASUNCION/Silvio Pettirossi		A/L/E		
CONCEPCION		E		
ESTIGARRIBIA		E		
FILADELFIA		E		
PERU				
AYACUCHO	AYA	E	2011	
CAJAMARCA	MAR	E	2011	
PISCO/Pisco		T		Decommissioned / Desmantelado
TARAPOTO		E		Decomissioned / Desmantelado
SURINAME				
PARAMARIBO/Zorg En Hoop				Decomissioned / Desmantelado
ZANDERY/Johan Adolfo Pengel Intl.		A/L/E		Decomissioned / Desmantelado

Administration/Location Administración/ Lugar	Identification/ Identificación	Function/ Función	Deactivation Date/ Fecha de desactivación	Remarks/ Observaciones
1	2	3	4	5
URUGUAY				
COLONIA/Internacional de Colonia		A/L		
MALDONADO/Intl C/C Calos A.		A/L		
Curbelo				
Laguna del Sauce				
MONTEVIDEO/Aeropuerto Angel S. Adami Intl.		A/L		
MONTEVIDEO/Carrasco Intl.		A/L/T/E		
RIVERA/Cerro Chapeu Intl.		A/L		
SALTO/Nueva Hesperides Intl.		A/L/E		
VENEZUELA				
CABO CODERA		E		
CARACAS/Simon Bolivar Intl., Maiquetia		A/L/E		
CARUPANO		E		
ELORZA		E		
GRAND ROQUE		E		
LA DIVINA PASTORA		E		
MARACAIBO/La Chinita Intl.		A/L/E		
MARGARITA I./ Intl. Del Caribe, Gral. Santiago Marino		A/L/E		
TUCUPITA		E		
VALENCIA/Zim Valencia Intl.		A/L		

APPENDIX P

UNIFIED REGIONAL SURVEILLANCE STRATEGY
CAR/SAM REGION

Table of Contents

1	**Introduction**	3A-2
1.1	General Considerations	3A-2
1.2	Scope of the Surveillance Strategy	3A-2
1.3	Structure of the Document	3A-3
1.4	Intended Readers	3A-3
2	**Surveillance Operational Scenario Evolution**	3A-4
2.1	En-Route and TMA Airspace	3A-4
2.2	Aerodrome Operations	3A-5
2.3	Aircraft Systems	3A-5
2.4	Operational Drivers Timeframe	3A-6
3	**Surveillance Infrastructure Evolution**	3A-7
3.1	En-Route and TMA Airspace	3A-7
3.2	Aerodrome Operations	3A-8
3.3	Aircraft Systems	3A-8
3.4	Surveillance Infrastructure Timeframe	3A-10
3.5	Regional Action Plan	3A-11
3.6	Regional Action Plan Timeframe	3A-12
Annex A		3A-13
Annex B		3A-14
Annex C		3A-17
Annex D		3A-19
Annex E		3A-20

SURVEILLANCE STRATEGY FOR CAR/SAM REGION

1. Introduction

1.1. General considerations

1.1.1 This initial document is the result of the task assigned to CNS Committee - CNS/SUR/TF from GREPECAS 14 Meeting in which the Preliminary elements for a Regional Surveillance Strategy and the Regional CAR/SAM Strategy for short, medium and long term ADS-C and ADS-B use have been integrated into a Unified Regional Strategy for the Implementation of Surveillance Systems. This is a live document based on the Global and Regional Planning:

a) The Global Strategies are described on Doc 9750 Global Air Navigation Plan on its initiatives:
   - GPI-09 Situational Awareness: promotes the operational implementation of data link surveillance, and the definition of the use of ADS-B and ADS-C.
   - GPI-17 Data link Applications promotes the use of data link applications, and its harmonization for seamless and interoperable operations.

b) The CAR/SAM Regional Implementation of Surveillance Systems: Doc. 8733 "CAR/SAM Regional Air Navigation Plan" CNS Table 4A Surveillance System Regional Plan.

1.1.2 The main objective of this strategy is to propose the surveillance systems that are suitable to be applied in short and medium terms within the CAR/SAM Regions and to define an evolutionary path that will promote safety, interoperability and cost effectiveness of the required infrastructure to meet the future ATM needs.

1.1.3 The surveillance strategy should be seen as a guidance document to all stakeholders, without any regulatory or mandatory requirements. Appropriate regulations should be published by Air Navigation Authorities when the use of new surveillance techniques is to be introduced in the States.

1.1.4 The envisaged goal of this strategy is a regional surveillance infrastructure that enables the interoperability of aircraft equipage throughout the CAR/SAM Regions in cost effective way.

1.2 Scope of the Surveillance Strategy

1.2.1 Implementation of surveillance systems should be based on a harmonized strategy for the CAR/SAM Regions that would take into account the operational requirements and relevant cost-benefit analyses. It should also be based on Action Plans to ensure that CAR/SAM States, Territories and International Organizations implement the necessary systems in accordance with consistent timescales.

1.2.2 The surveillance technologies considered in this strategy to meet present and future operational expectations are listed below and briefly explained in Annex C:

- Primary Radar (PSR, SMR/ASDE);
- Secondary Surveillance Radar (SSR);
- Automatic Dependent Surveillance-Broadcast (ADS-B);
- Automatic Dependent Surveillance-Contract (ADS-C); and
- Multilateration.

1.2.3 In order to provide a global view of the surveillance strategy, the operational drivers, the required surveillance infrastructure and the regional studies and trials proposed in this document have been presented in chronological order.

1.2.4 The dates illustrated in this document define when surveillance systems are estimated to become regionally operational. Nevertheless, some of the surveillance systems described in this strategy will be used to solve local issues prior to the timelines in this document, and thereby will migrate from pioneer areas into larger regional areas.

1.2.5 New surveillance technologies implementation policy for the CAR/SAM Regions should be based first on a voluntary implementation in pocket areas, using certified existing equipage which is to be followed by an implementation in wider areas supported by the Implementing Rule related to the upgraded equipage.

1.2.6 Surveillance strategy should be seen as a link between the Global Air Navigation Plan for CNS/ATM Systems (Doc. 9750) and the stakeholders' strategy for the air surveillance applications.

1.2.7 This surveillance strategy is derived from the Global Air Navigation Plan for CNS/ATM Systems (Doc. 9750).

1.2.8 CAR/SAM States, Territories and International Organizations when implementing surveillance systems, need to be cognizant of the operational requirements of the Global ANP in particular GPIs 09 and 17 (Situational Awareness and Implementation of data link applications).

1.3 Structure of the Document

1.3.1 This document is structured as follows:

- Section 1 (this section) presents the general considerations, explains its scope and structure and describes the intended readers and relationship with other documents.
- Section 2 describes the Surveillance Operational Scenario Evolution, i.e. the envisaged operational drivers for the short (2008-2011), medium (2011-2015) and long terms (2015-2025) in the Air Surveillance field, for En-Route and TMA Airspace, Aerodrome Operations and Aircraft Systems.
- Section 3 details the Surveillance Infrastructure Evolution required to cope with the foreseen operational environment and specifies a tentative action plan that needs to be accomplished in a timely manner, in order to promote the operational use of the new surveillance technologies.
- **Annex A** provides the meaning of the Acronyms used in this document.
- **Annex B** provides the definitions of the different terms used in this document.
- **Annex C** describes the surveillance techniques discussed in this document.
- **Annex D** presents the potential airspaces for ADS-C and ADS-B implementation.
- **Annex E** presents IATA survey on navigation, surveillance and communication equipment on board of aircrafts.

1.4 Intended Readers

1.4.1 This strategy was developed for the following stakeholders group within the CAR/SAM Regions:

- The departments of the National Supervisory Authorities of CAR/SAM countries who are responsible for verifying ATM Surveillance Systems;
- The departments of the civil and military ANSP of CAR/SAM states that are responsible for procuring/designing, accepting, and maintaining ATM Surveillance Systems;
- The Airport Operators, who are responsible for procuring/designing, accepting, and maintaining Surveillance Systems at airports level; and
- The Airspace Users, who are the final clients of the ATM Surveillance Systems.

2. Surveillance Operational Scenario Evolution

2.1. En-Route and TMA Airspace

2.1.1. Each State/Territory/International Organization needs to evaluate the present day maximum density traffic and that expected for the year 2005 and give due consideration to the useful life of their radars and the potentiality for their replacement with ADS-B.

2.1.2. The surveillance operational scenario evolution for En-Route and TMA airspace is based on three fundamental principles for ground users in such airspace. These principles are dominant throughout the complete surveillance strategy and are:

- An independent surveillance system to track non-cooperative targets in TMA and En Route airspace where and when required;
- An independent surveillance system to track cooperative targets in TMA and en-route airspace; and
- Dependant cooperative surveillance.

2.1.3. For En-Route and TMA Airspace, security and safety will remain key requirements throughout. The need to provide detection of aircrafts that are not equipped with SSR transponders or ADS-B, as well as the ones experiencing an avionics failure, is permanent for TMA Airspace. Detection of non cooperative targets for En-Route Airspace will also remain for specific areas, according to homeland security requirements.

2.1.4. Short term (until 2011)

2.1.4.1 Until 2010, independent surveillance systems will be predominant in CAR/SAM Regions. Until then, target position will only be determined by the ground sensors (PSR, SSR and Mode S radars).

2.1.5. Medium term (2011-2015)

2.1.5.1. From 2010 onwards, the provision of ADDs to ground stations to support TMA and En Route operations is envisaged, following the increasing rate of SSR Mode S equipped aircraft (new and overhauled) that will be able to transmit ADS-B messages (ADS-B out).

2.1.5.2. The first set of new applications that are envisaged to be supported in CAR/SAM Region are the ground Surveillance (ADS-B out) in a non-radar environment (ADS-B-NRA), in a radar environment (ADS-B-RAD) and Airborne Derived Data (ADS-B-ADD). ADS-B-out is expected to reach initial operational capability status in 2015.

2.1.6. Long term (until 2015-2025)

2.1.6.1. Other possible new applications are related to Airborne Surveillance (ADS-B-in, possibly supplemented by TIS-B) including: Airborne situational awareness (ATSA-AIRB), visual separation on approach (ATSA-VSA) and In-trail Procedure in oceanic airspace (ATSA-ITP). ADS-B-in for air traffic situational awareness is expected to be launched after 2015.

2.1.6.2. It is anticipated that an integration of airport and airspace surveillance will become more widespread from 2015 onwards. This requires an increased integration of surveillance information at the SDPD level, which will require updating to process and deliver the new information to surveillance users as the new systems become operational.

2.1.6.3. Until 2015, the ground service provider will remain responsible for the separation service and for maintaining separation. However, from 2015 onwards, there will be a number of ATM concepts which will drive the evolution of the surveillance environment, these are:

- Enhanced medium term planning with the tasks of the controllers operating in En-Route and TMA sectors becoming increasingly supported by automation. The controller will make use of ADD to provide a more accurate view of the situation and improvements in safety nets;
- Surveillance derived information will be made available to support Airborne Traffic Situational Awareness;
- Flight data processing systems will be upgraded to provide full 4D trajectory prediction aligned with the capabilities of 4D FMS;
- The limited delegation of separation tasks to aircrews in low and medium density airspace will require additional avionics infrastructure and additional tools for the controller and aircrew; and
- Introduction of preferred routing will require flight information to be displayed in real time to the controller.

2.2. Aerodrome Operations

2.2.1 Short term (until 2011)

2.2.1.1 For selected airports, detection of all mobiles within the aerodrome area is permanent in short term and throughout the strategy timeframe.

2.2.2 Medium term (2011-2015)

2.2.2.1 The use of ADDs to support aerodrome operations is envisaged; and the implementation of A-SMGCS level I (which may include ADS-B Package I, ADS-B-APT application) and A-SMGCS level II will be enabled by systems such as Multilateration

2.2.3 Long term (until 2015-2025)

2.2.3.1 Where airport operators foresee a benefit, a long term implementation of A-SMGCS level III (which may include the ADS-B Package I, ATSA SURF application) and A-SMGCS IV may start. This may require an ADS-B-in infrastructure and an equipage of selected, appropriate airport vehicles with transponders.

2.3. Aircraft Systems

2.3.1 Short term (until 2011)

2.3.1.1 In the short term, the use of SSR or SSR Mode S systems for ground based surveillance radar or Multilateration systems will continue. This means that no additional equipment is foreseen on the aircraft until 2011.

2.3.2 Medium term (2011-2015)

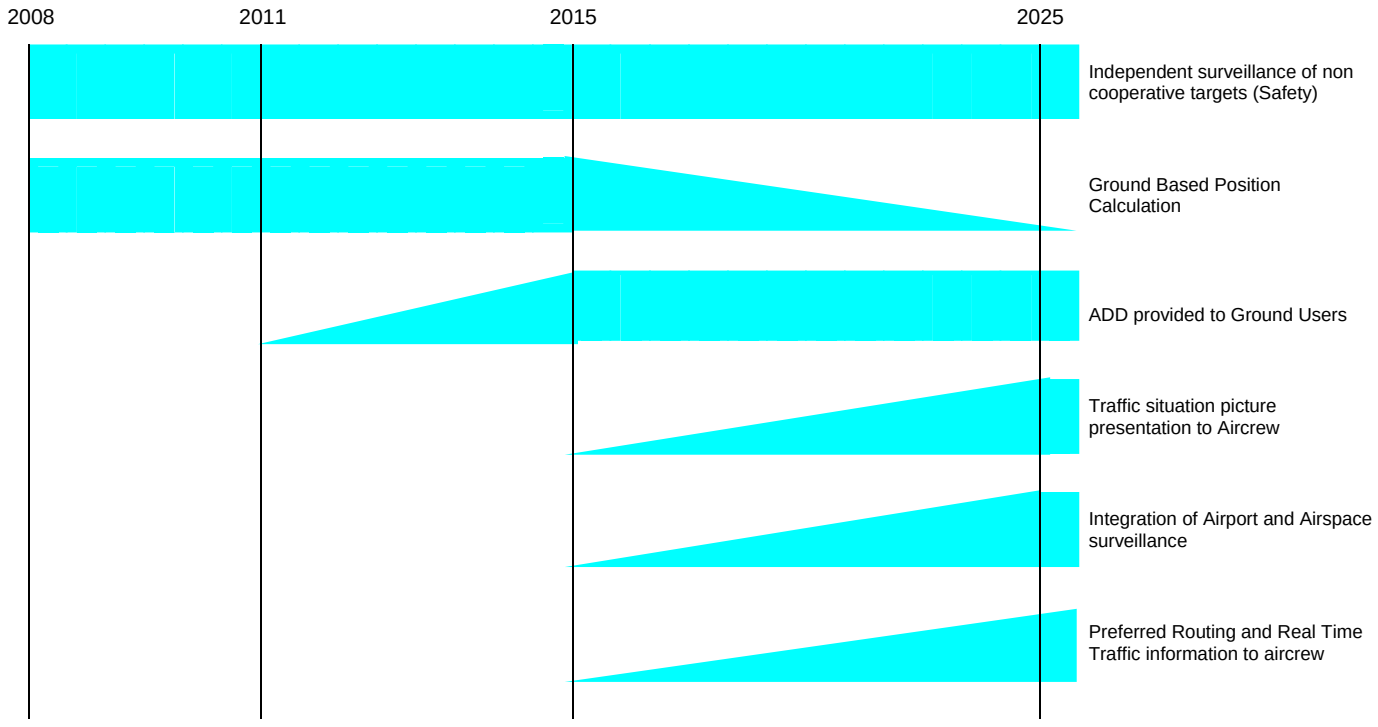
2.3.2.1 The implementation of new ground Surveillance Applications (ADS-B out) will increase, which will require integration between the aircraft navigation system and mode S transponders, in order to transmit intent information to other aircraft and ground users. This will be enabled by ADS-B using 1090 MHz Extended Squitter.

2.3.3 Long term (until 2015-2025)

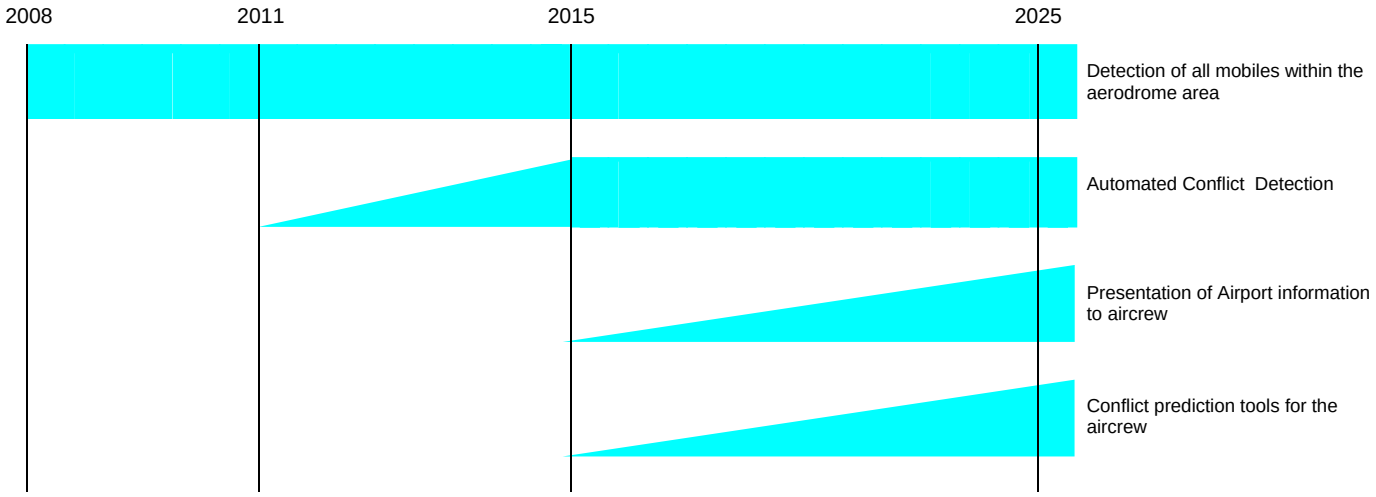
2.3.3.1 The implementation of ADS-B ASAS situational awareness applications will require an airborne SDPS and display system.

2.4. Operational Drivers Timeframe

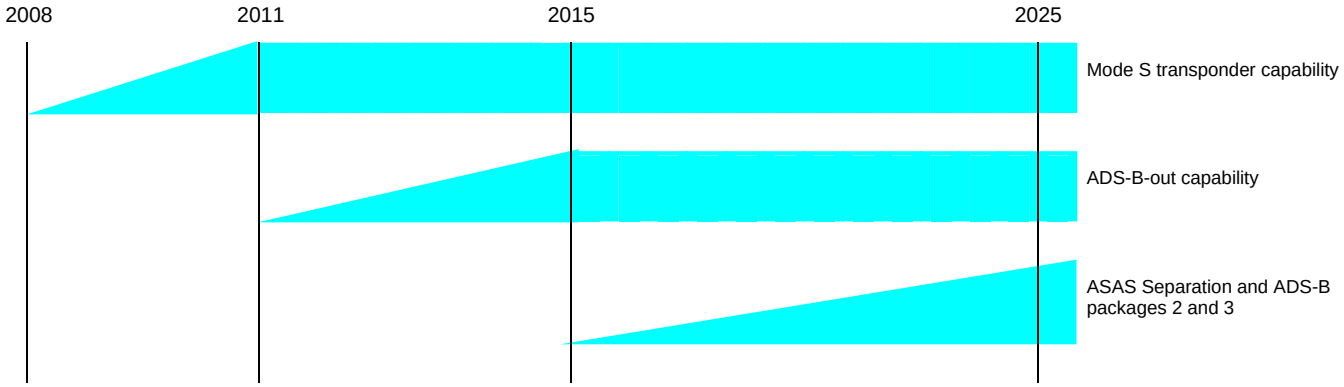
En Route and TMA Airspace



Aerodrome Operations



Aircraft Systems



3. Surveillance Infrastructure Evolution

3.1. <u>En-Route and TMA Airspace</u>

3.1.1. Independent Surveillance, in the form of Primary Surveillance Radar still be used in En-Route Surveillance and Terminal Maneuvering Area (TMA) based on local country specific security requirements.

3.1.2 Short term (until 2011)

3.1.2.1 From 2008 to 2011, co-operative surveillance, in the form of SSR and SSR Mode S, will still be the main means of surveillance and will be extensively used for air traffic surveillance by civil agencies for TMA and En-Route services within coverage of (ground based) interrogator station(s). Implementation of monopulse SSR, adaptable to Mode S, in medium- and high-traffic en route and terminal areas will continue. Use of ADS-B (ES Mode S receivers) will begin to provide surveillance for en-route and terminal areas not covered with radar and to strengthen surveillance in areas covered with SSR Modes A/C and S.

3.1.3 Medium term (2011-2015)

3.1.3.1 SSR Mode S elementary surveillance will be implemented from 2010 onwards in high density TMAs in order to improve secondary radar performances. Since there will still exist legacy aircrafts that will not be able to reply on mode S, a mixed mode interrogation will be required up to 2015.

3.1.3.2 Ground implementation for ADS-B (based on ES Mode S receivers) will increase from 2011 onwards to fill en route and terminal areas not covered with radar and to strengthen surveillance in areas covered with SSR Modes A/C and S.

3.1.3.3 Depending on the percentage of ADS-B equipped aircrafts, wide area multilateration (WAM) implementation should be considered as a possible transition path to ADS-B environment in a shorter timeframe.

3.1.3.4 ADS-C surveillance should be operationally used in all oceanic and remote airspace associated with FANS 1/A capacities.

3.1.3.5 Surveillance Data Processing and Distribution systems based on surveillance server technology will have to be progressively upgraded, in order to merge legacy radar data information contained in the ADD and/or from Multilateration position calculations and promote data sharing between States using TCP/IP patterns.

3.1.3.6 Each State/Territory/Organization should investigate and report their Administration’s policy in respect to the ADS-B data sharing with their neighbors and from cooperative goals.

3.1.3.7 The ADS-B data sharing plan should be based on selecting centres by pairs and analyzing the benefits and formulating proposals for the ADS-B use for each pair of centre/city with the purpose to improve the surveillance capacity.

3.1.3.8 To support the ADS-C and ADS-B regional plan, the States/Territories/International organizations, as well as the entity representing the airspace users, should organized and provide the following information; a focal point of contact, its respective implementation plan, including a time-table, and information on its air-ground communications and automation systems.

3.1.3.9 The ADS-B data links technology that will be used for the Mode S 1,090 MHz extended squitter (1090 ES). ADS-B data sharing could be initiated.

3.1.3.10 SSR Mode A/C and SSR Mode S will continue to be the main surveillance elements for approach, en route, and terminal areas.3.1.4 Long term (until 2015-2025)

3.1.4.1 The majority of the SSR and SSR Mode S systems currently installed would be at the end of their operational life by 2015. SSR Mode A/C radars that have completed their life cycle by that time will not be replaced. Continuation of the ADS-B use with the 1090 ES technique and the planning initiation for the ADS-B implementation by new data links to satisfy the ATM global system requirements will fully replace those decommissioned SSRs.

3.2. Aerodrome Operations

3.2.1 Short term (until 2011)

3.2.1.1 The main technology for calculating the position of mobiles (both aircraft and vehicles) will be Surface Movement (primary) Radar. Implementation of multilateration will gradually increase, where aircraft respond to SSR Mode A/C or SSR Mode S queries.

3.2.2 Medium term (2011-2015)

3.2.2.1 A-SMGCS Level I/II will provide the benefits at the aerodrome and additional information may be required by the ground systems. The most effective means of achieving this would be via ADS-B, since aircraft will already be equipped and there will be a cost-effective upgrade path for the Multilateration ground stations, although there may be an impact on the avionics. Although many Multilateration systems are configured with their own data fusion trackers as standard, a possible upgrade to existing SDPDs to support Aerodrome operations will be required.

3.2.3 Long term (until 2015-2025)

3.2.3.1 The introduction of A-SMGCS Levels III/IV at selected aerodromes will require aircrew to be presented, with an airport map and other mobiles for situational awareness and possible conflict prediction tools in the aircraft. Where airports foresee a benefit from these kinds of applications then a TIS-B service may be required to ensure a complete and consistent airport situation picture.

3.3. Aircraft Systems

3.3.1 Short term (until 2011)

3.3.1.1 In accordance with ICAO requirements, all aircraft flying within CAR/SAM controlled airspace are required to be equipped with a pressure altitude reporting device. It is not foreseen that there will be significant changes for aircraft systems prior to 2011 on that matter.

3.3.1.2 The proportions of equipped aircrafts are also critical for the ADS-C and ADS-B deployment, for which it is required that ANSP and aircraft users periodically coordinate, al least, the following information: number of equipped aircrafts operating in the concern airspace, number and name of the airlines that have equipped aircrafts for ADS-C and ADS-B, type of equipped aircrafts, categorization of the accuracy/integrity data available in the aircrafts.

3.3.1.3 Until 2011 the implementation of ACAS II systems throughout commercial and general aviation will be completed using basic Mode S transponder for elementary surveillance (ELS). ADS transponders are to be integrated into the GNSS avionics for valid data.

3.3.1.4 This period will see:

- Implementation of SSR radars Mode S only in high-traffic-density approach, en route, and terminal areas,
- Implementation of monopulse SSR, adaptable to Mode S, in medium- and high-traffic en route and terminal areas.
- Begin ground implementation for ADS-B (ES Mode S receivers) for en route and terminal areas not covered with radar, and strengthen surveillance in areas covered with SSR Modes A/C and S.
- Begin the implementation of multilateration, where aircraft respond to SSR Mode A/C or SSR Mode S queries for aerodrome surface movement surveillance.

3.3.2 Medium term (2011-2015)

3.3.2.1 2011-2015 will see the implementation of Mode S in those monopulse SSRs that have Mode S capabilities, in areas with coverage and increased air traffic, increased ADS-B installations on ground (ES Mode S receivers) for en route and terminal areas not covered by radar, and strengthened surveillance in areas covered by SSR Mode A/C and SSR Mode S. The update of Mode S transponder will begin, so that it can operate in ADS-B and multilateration environments.

3.3.2.2 If aircraft are operating in airspace where the ADS-B Package I ground based surveillance applications are in use, then the avionics configuration will require changes to deliver the additional aircraft derived data required.

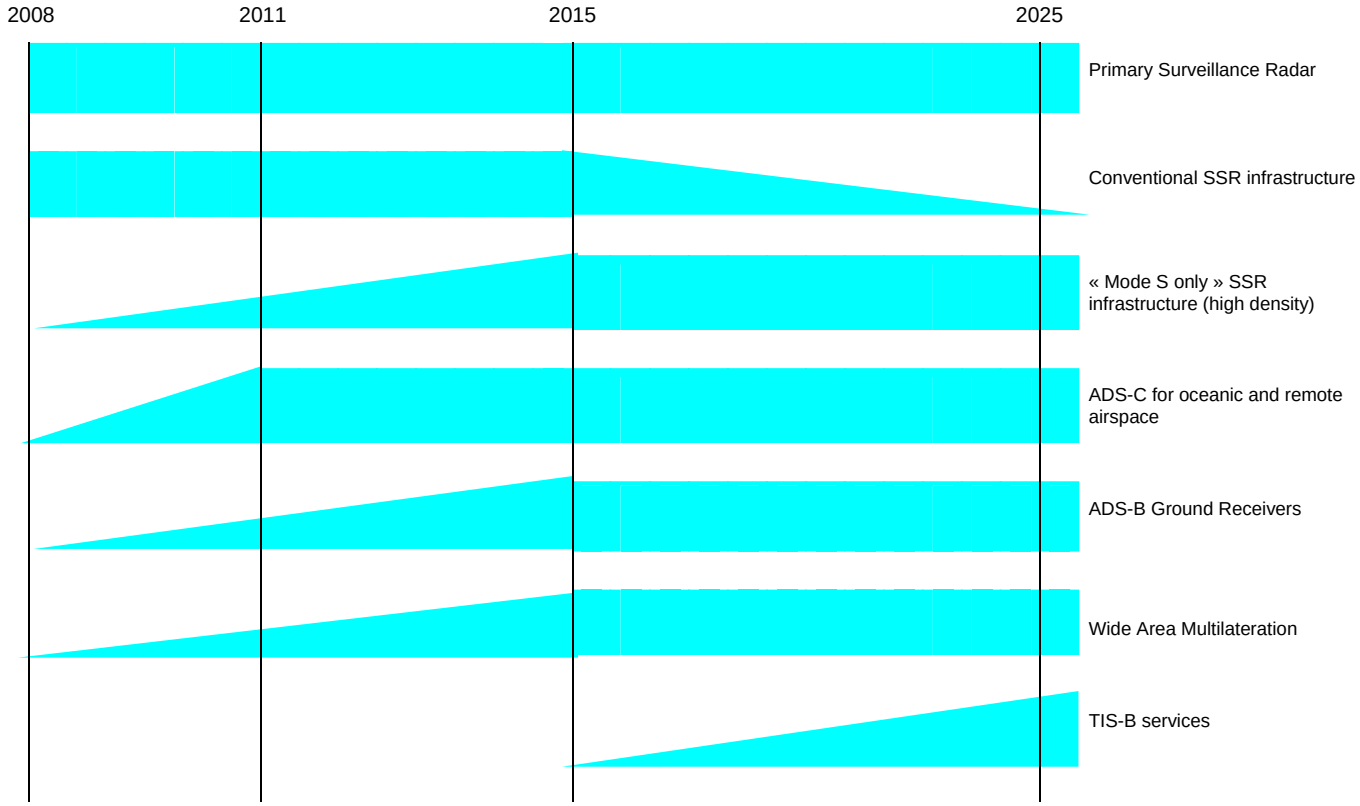
3.3.2.3 During the period 2011 – 2015 there will be increased implementation of multilateration, where aircraft respond to SSR Modes A/C and S queries for surveillance of aerodrome surface movements, and begin the implementation of surveillance applications in approach, en route and terminal areas (wide area multilateration, WAM) in areas that are not covered by radar surveillance and to strengthen radar surveillance.

3.3.3 Long term (until 2015-2025)

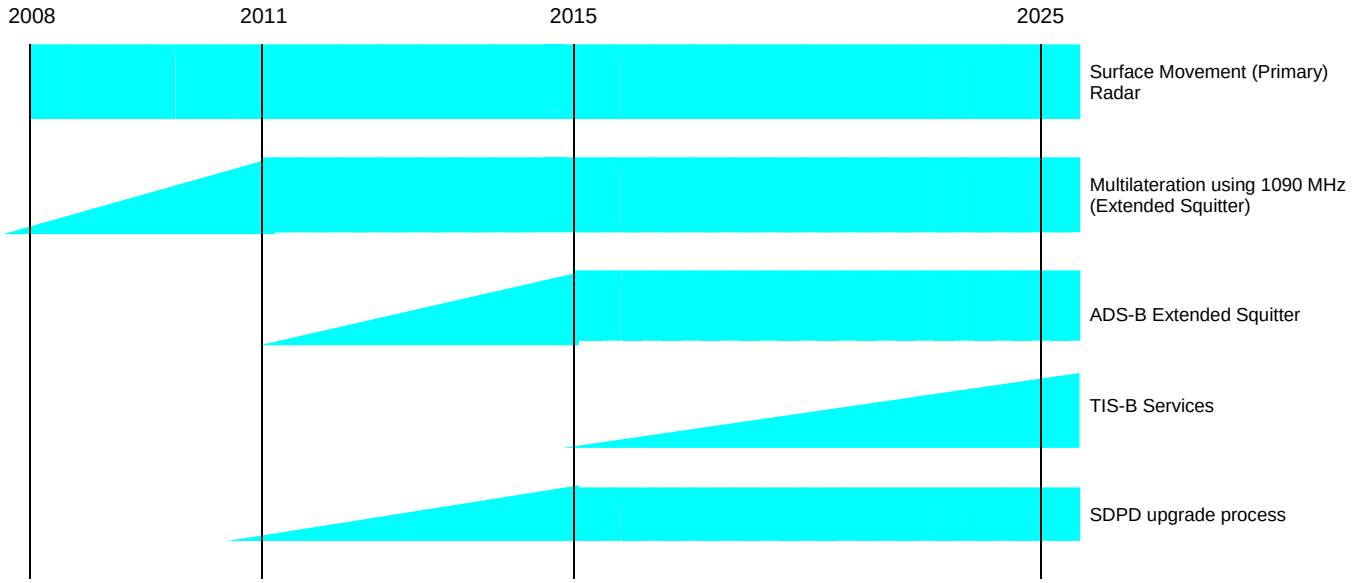
3.3.3.1 From 2015 onwards, the move from ASAS spacing to ASAS separation and preferred routing may require a high integrity traffic situation picture, therefore the use of TIS-B may be required as well as the implementation of an airborne Surveillance Data Processing System (SDPS) to integrate ADS-B in and TIS-B for presentation of the air situation picture on a graphical display.

3.4. Surveillance Infrastructure Timeframe

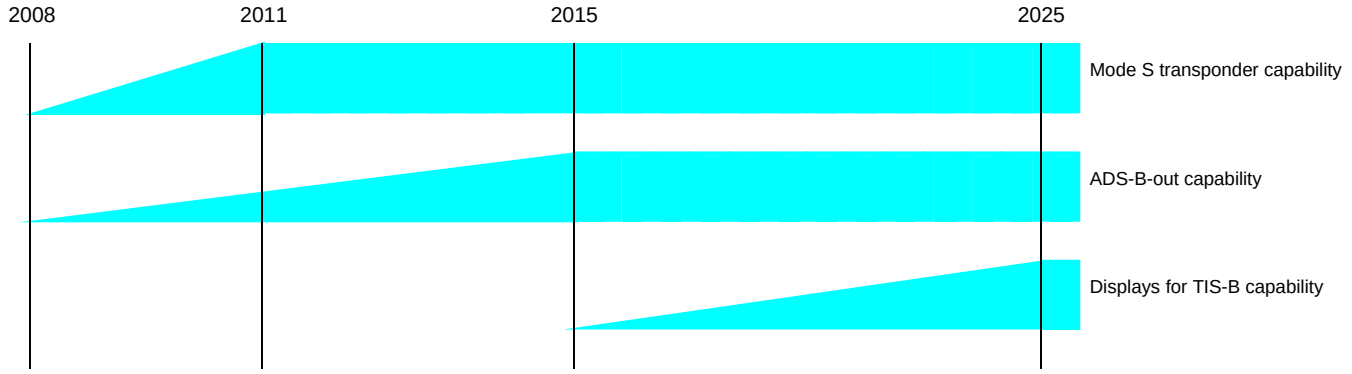
En Route and TMA Airspace



Aerodrome Operations



Aircraft Systems



3.5. Regional Action Plan

3.5.1. Short term (until 2011)

3.5.1.1. There will be a continuous need in short term to perform periodic assignment and monitoring of mode S 24-bits address by all Civil Aviation Authorities in the CAR/SAM Regions. Regional trials will have to be conducted in order to support the operational introduction of new techniques such as ADS-B and WAM. Such assessments would include Cost Benefit Analyses, safety assessments and detailing operational requirements. In order to validate the timeframe forecasted by this surveillance strategy and assess the proportions of equipped aircrafts, each State/Territory/International Organization should evaluate the:

- useful life of their radars and the potentiality for their replacement with ADS-B;
- locations of potential ADS-C or ADS-B ground station sites;

- capabilities of existing and planned ATC automation systems to support ADS-C or ADS-B applications;
- maximum density traffic nowadays and expected for the year 2025;
- number of equipped aircrafts operating in the concern airspace;
- number, name and type of equipped aircraft of the airlines that have equipped aircrafts for mode S, ADS-C and ADS-B;
- rate of faulty Mode S airborne equipment and its behavior; and
- categorization of the accuracy/integrity data available in the aircrafts.

3.5.1.2. The ADS-B deployment should be associated at early stages in coordination with the States/Territory/International Organizations responsible for the control of adjacent areas, and the correspondent ICAO Regional Office, establishing a plan in the potential areas of ADS-B data sharing, aimed at a coordinated, harmonious and interoperable implementation. It is also required to ensure that the regional surveillance standards and surveillance functional architecture are consistent with the Required Surveillance Performance (RSP), after the approval of RSP provisions (expected to be delivered by 2009).

3.5.1.3. As the increased dependence on ADS-B (1090 MHz Extended Squitter) is expected to grow, there is concern that the band will become saturated as more information is loaded onto the restricted band. Therefore it is required to study whether the use of 1090MHz will continue to support surveillance requirements.

3.5.2 Medium term (2011-2015)

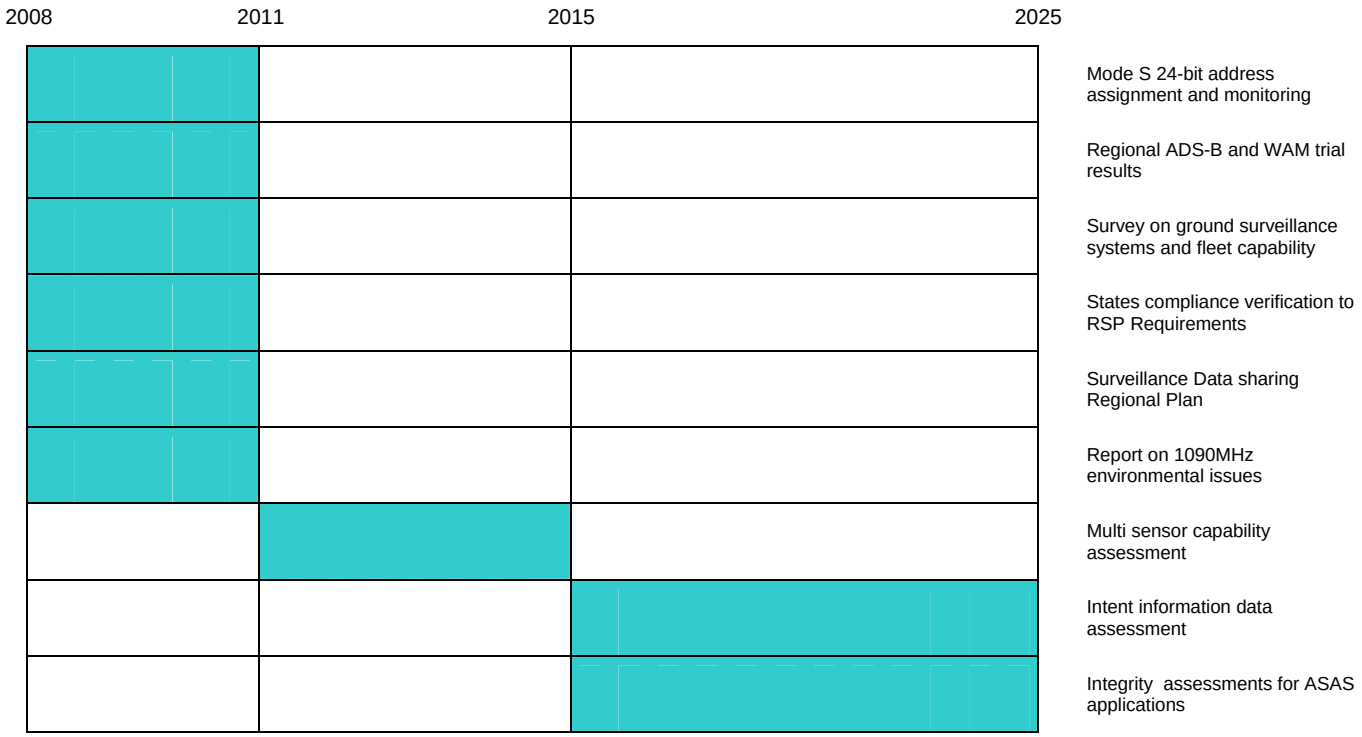
3.5.2.1 In medium term, the capabilities of current Multi Sensor Trackers are to be assessed in light of the more stringent requirements need to support and process increasing amount of ADD.

3.5.3 Long term (until 2015-2025)

3.5.3.1 In long term, it is required to identify the impact of the new procedures that are predicted to require ‘intent’ information from the aircraft. The precise definition of intent requires clarification to ensure avionics equipment and ground processing products can be developed in time to deliver the required information. It is also required to identify whether the integrity requirements of the information presented to the aircrew while performing ADS-B Package I airborne surveillance applications may require the need for the uplink of traffic information to the aircraft to validate the integrity of the navigation data transmitted by ADS-B.

3.6. Regional Action Plan Timeframe

Regional Action Plan Timeframe



ANNEX A

ACRONYMS

ACAS	Aircraft Collision Avoidance System
ADD	Aircraft Derived Data
ADS	Automatic Dependent Surveillance
ADS-B	ADS-Broadcast
ADS-C	ADS-Contract
ANC	Air Navigation Council
ANSP	Air Navigation Service Provider
APP	Approach (Centre or Control)
ASAS	Airborne Separation Assistance System
ASDE	Airport Surveillance Detection Equipment
A-SMGCS	Advanced Surface Movement and Guidance Control System
ATC	Air Traffic Control
ATM	Air Traffic Management
CDTI	Cockpit Display of Traffic Information
CNS	Communications Navigation and Surveillance
CPDLC	Controller Pilot Data link Communications
FDPS	Flight Data Processing System
FMS	Flight Management System
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
ICAO	International Civil Aviation Organization
M-SSR	Mono-pulse Secondary Surveillance Radar
PSR	Primary Surveillance Radar
RSP	Required Surveillance Performance
SARPs	Standards and Recommended Practices
SDPD	Surveillance Data Processing and Distribution System
SMGCS	Surface Movement Guidance and Control System
SMR	Surface Movement Radar
SSR	Secondary Surveillance Radar
TCAS	Traffic Collision Avoidance System
TIS-B	Traffic Information Service - Broadcast
TMA	Terminal Maneuver (Control) Area

ANNEX B

DEFINITIONS

Surveillance is defined as the technique for the timely detection of targets and the determination of their position (and if required, the acquisition of supplementary information relating to targets) and the timely delivery of this information to users in support of the safe control and separation of targets within a defined area of interest.

Ground Based Surveillance is defined as 'ground based techniques for the timely detection of targets and the determination of their position (and if required, the acquisition of supplementary information relating to targets) and the timely delivery of this information to users in support of the safe control and separation of targets within a defined areas of interest'. The 'defined area of interest'' relates to the ability of the User to select which information is deemed necessary to ensure the safe implementation of the surveillance application within the physical airspace for which they are responsible.

Independent surveillance is a technique where the position of the aircraft is calculated by the ground and is not dependent on position data transmitted by the aircraft.

Dependent surveillance like ADS-B is based on the principle of the target informing the ground system and other targets of its own position. The target may also provide aircraft derived data. Dependent surveillance delivers Aircraft Derived Data (ADD). ADD may contain navigation position, identification and other data from the aircraft.

Cooperative surveillance is a technique that requires the mobile to equip with a dedicated surveillance systems which responds to transmissions from the ground system.

Non cooperative surveillance is a technique where the position of the aircraft is calculated by the ground and is not dependent on position data transmitted by the aircraft or upon any deliberate interaction in the aircraft with active components e.g SSR transponders.

Basic surveillance delivers to the surveillance user:

- Aircraft position (latitude, longitude and altitude)
- Mode A

Elementary surveillance includes basic surveillance and also delivers to the surveillance user:

- Aircraft identity - Flight Identity or tail registration and 24 bit address,
- Flight Status,
- Aircraft pressure altitude in 100 ft or 25 ft units, if the aircraft is appropriately equipped.

Enhanced Surveillance delivers to the surveillance user a set of Aircraft Derived Data (ADD) to provide additional information to ground or air based ATM systems and safety nets. Enhanced surveillance may be delivered to ground system through Mode S SSR, ADS-B or Multilateration system (through active interrogations).

Aircraft Derived Data Different cooperative surveillance technologies extract different information from the aircraft. In its simplest form, the Mode A and Mode C information provided by the aircrafts SSR transponder can be classified as aircraft derived data or down linked aircraft parameters. When implemented using SSR Mode S, the following current or short term Aircraft Parameters are automatically extracted from the aircraft:

- Air Speed (Indicated Air Speed and Mach Number)

- Ground Speed
- Magnetic Heading Roll Angle
- Selected Altitude Track Angle Rate (or, if not available, True Air Speed)
- True Track Angle Vertical Rate

The enhanced surveillance parameters delivered by ADS-B include the position and longer term intent parameters e.g. 4D trajectory, trajectory change points etc.

Surveillance users are:

- Oceanic ATM Centers
- En-Route ATM Centers
- TMA/Approach ATM Units
- Airports/Tower ATM & Ground Traffic Management Units
- Military Centers
- Airline Aircraft Operations Centre
- Enhanced Tactical Flow Management System
- Data processing systems, such as Flight Data Processing Systems
- ATM Tools, such as Short Term Conflict Alert
- The target
- Adjacent Surveillance Functions
- Non ATM functions (e.g. Search and Rescue).

Surveillance Data Processing and Distribution systems accept information from surveillance sensors, process the information to develop the 'best' estimate of the position of a target and supply this information to users. In addition the SDPD may receive ADD and distribute this to surveillance users attached to the position information.

A-SMGCS is an airport system which provides surveillance to a ground controller. It has four implementation levels that provide different levels of functionality:

Level I A-SMGCS provides:

- Position; the presentation to a controller of the location of an aircraft or vehicle;
- Identification; the presentation to the controller the identity (flight identification or call sign) of the aircraft or vehicle.

Level II A-SMGCS provides a conflict prediction function to alert the controller of:

- Potential collisions (between aircraft/vehicle or aircraft/aircraft) on the runway surface or protected areas
- Potential entry of aircraft or vehicles into restricted areas.

Level III A-SMGCS includes functions that are being defined by the Airports and Environments Business Division to share traffic situation awareness amongst pilots and drivers and the introduction of the automated routing function. The guidance function may be enhanced by:

- Display of the airport map showing taxiways, runways, obstacles and the mobile position to aircrew and drivers;
- Providing dynamic map with updates of the runway status
- Triggering automatically the dynamic ground signs (stop bars, centerline lights, etc.) according to the route issued by the controller.

Level IV A-SMGCS corresponds to the improvement of the functions implemented at the level III. Of particular note to the surveillance strategy, the control function will be complemented by a conflict resolution function in the cockpit or vehicle.

ADS-B Package I is a set of Ground Based Surveillance, Airborne Traffic Situational Awareness and Airborne Spacing applications. Note that since reference 6 was published, the application descriptions have been refined, although they remain largely in accordance with the referenced document. The text below summarizes the applications as of November 2005.

ADS-B Package I Ground Based Surveillance Applications are aimed at improving ATC surveillance on the ground for En-Route and TMA airspace and on the airport surface and at enhancing ATC tools through the provision of aircraft derived data enabled by ADS-B. These applications are:

- ADS-B-RAD ATC surveillance for TMA and En-Route airspace in areas that are already covered by radar systems
- ADS-B-NRA ATC surveillance in non-radar areas
- ADS-B-APT Airport surface surveillance
- ADS-B-ADD Aircraft derived data for ATC tools

ADS-B Package I Airborne Surveillance Applications are aimed at improving airborne (cockpit) surveillance in En-Route and TMA airspace as well as on the airport surface. These applications are:

- ATSA-SURF Enhanced traffic situational awareness on the airport surface
- ATSA-VSA Enhanced visual separation on approach
- ATSA-ITP In-trail procedure in oceanic airspace
- ATSA-AIRB Enhanced traffic situational awareness during flight operations

ADS-B Package I Airborne Spacing Applications are aimed at using airborne (cockpit) surveillance capabilities to carry out applications where the flight crew is able to maintain a time or distance from designated aircraft. These applications are:

- ASPA-S&M Enhanced sequencing and merging operations
- ASPA-C&P Enhanced crossing and passing operations

ASAS Applications are a set of operational procedures for controllers and flight crews that make use of the capabilities of Airborne Separation Assistance Systems to meet a clearly defined operational goal.

Airborne Spacing (ASPA) is an ASAS application category where the flight crew is able to maintain a time or distance from designated aircraft. The controller can use new spacing instructions to expedite and maintain an orderly and safe flow of traffic and is still responsible for providing separation in accordance with the applicable ATC separation minima. New procedures and responsibilities are expected with the introduction of Airborne Spacing applications.

Airborne Separation is an ASAS application category where the flight crew is able to provide separation from designated aircraft in accordance with the applicable airborne separation minima. In this application the controller can delegate separation relative to a designated aircraft to the flight crew through a new clearance however the controller is responsible for providing separation in accordance with the applicable ATC separation minima from other aircraft. New procedures and responsibilities are expected with the introduction of Airborne Separation applications.

Airborne Self Separation is an ASAS application where the flight crew is able to provide separation from all known aircraft in accordance with the applicable airborne separation minima. Airborne self separation is not considered within the timescales of this strategy.

ANNEX C

SURVEILLANCE TECHNIQUES

Primary Radar (PSR, SMR/ASDE)

Primary Radar operates by radiating high levels of electromagnetic energy and detecting the presence and characteristics of echoes returned from reflected objects.

Target detection is totally based on the reception of reflected energy, it does not depend on any energy radiated from the target itself, i.e. no carriage of airborne equipment is required.

Secondary Surveillance Radar (SSR)

Secondary Surveillance Radar (SSR) operates by transmitting coded interrogations in order to receive coded information from all SSR transponder equipped aircraft, providing a two way "data link" on separate interrogation (1030 MHz) and reply (1090 MHz) frequencies.

Replies contain positive identification, as requested by the interrogation, either one of 4096 codes (Mode A) or aircraft pressure altitude reports (Mode C). The co-operative concept ensures stable received signal strength and considerably lower transmitted power levels than Primary Radar. SSR enables Basic Surveillance.

SSR Mode S is a development of SSR using the same interrogation and reply frequencies as the SSR but the selective interrogations contain a unique 24 bit address that ensures all transmissions are only decoded by one aircraft's Mode S Transponder having that 24 bit address.

A Mode S station also transmits conventional SSR formats in order to detect SSR only aircraft (Mode A/C) in order to be downward compatible with SSR.

The SSR Mode S transponder is also a fundamental part of the ACAS airborne installation and the ADS-Broadcast when using the 1090 MHz Extended Squitter transmission. SSR Mode S enables elementary and enhanced surveillance.

Automatic Dependent Surveillance-Broadcast (ADS-B)

Automatic Dependent Surveillance - Broadcast (ADS-B) is a surveillance technique that allows the transmission of aircraft derived parameters, such as position and identification, via a broadcast mode data link for use by any air and/or ground users.

Each ADS-B emitter periodically broadcasts its position and other data provided by the onboard aircraft avionics systems. Any user, either airborne or ground based, within range of the emitter may choose to receive and process the information. Three technology options are available, these are ADS-B 1090ES [which has been selected as the initial link for CAR/SAM Region], VDL Mode 4 (Very High Frequency Data Link) and UAT (Universal Access Time). ADS-B enables elementary and enhanced surveillance.

Automatic Dependent Surveillance-Contract (ADS-C)

Automatic Dependent Surveillance - Contract (ADS-C) is a surveillance technique in which aircraft provide, via a data link, data such as position and identification, derived from the onboard aircraft avionics systems. A "contract" is established between the aircraft and the ground to transmit data at a particular event. An event could be time based, position based or as specified in the contract.

Currently ADS-C is usually implemented via SATCOM but any data link having the range capability would suffice. Whilst originally envisaged to be an ATN compliant data link, current implementations exploit a large part of the functionality through the FANS 1/equipment currently carried by many aircraft.

Traffic Information Service – Broadcast (TIS-B)

An air traffic situation picture derived by a ground based Surveillance Data Processing System may be broadcast from the ground to all aircraft within range and equipped with correct receivers. There are three roles of TIS-B, these are:

- TIS-B fundamental service: This 'gap filler service broadcasts information about aircraft that cannot be adequately obtained directly by ADS-B and is used to enhance the availability of surveillance information to users that are not normally able to receive ADS-B transmissions from other aircraft. This service will normally exclude from transmission those aircraft broadcasting ADS-B messages
- ADS-B validation service: This optional service compares aircraft ADS-B state vector data with surveillance data from ground-based sensors and broadcasts validation data
- ADS-B rebroadcast service: The automatic rebroadcast of ADS-B messages received over one data link, translated directly onto other data links for the purpose of extending ADS-B connectivity to users of incompatible data links.

Multilateration

Multilateration is a surveillance technique where aircraft replies from other SSR or SSR Mode S interrogations or spontaneous squitter message from Mode S transponder are passively received by 3 or more ground receiver stations. Using time of arrival techniques the position and altitude of the target can be determined. In some Multilateration systems, active Mode S selective interrogations are used to extract data from the aircraft.

The surveillance strategy distinguishes three levels of functionality, which are:

- Basic operation in which Multilateration uses time of arrival of signals to determine the position of aircraft.
- Elementary operation, which includes basic operation and the addition of active integrations to extract aircraft identification information from the flight systems
- Enhanced operations, which includes basic operations and the addition of active interrogations to extract any information (including aircraft identification) from the aircraft systems.

ANNEX D

POTENTIAL AIRSPACES FOR ADS-C AND ADS-B IMPLEMENTATION IN CAR/SAM REGION

Nb	State or Organization/ Center	Air Space	ADS Type	Status	Impl. Date	Remarks
1	Bahamas/ Nassau ACC	Nassau FIR	ADS-B	Study		Studies are being carried out
2	Cuba/ Habana ACC	Havana FIR (South East Zone)	ADS-B	Study		Studies are being carried out
3	Haiti/ Port au Prince ACC	Port au Prince FIR	ADS-B	Study		Studies are being carried out
4	México/ Mérida ACC Monterrey ACC	Golf of Mexico (Central zone between Houston Oceanic and Mexico FIRs)	ADS-B	Planned		Based on an agreement Mexico - USA
5	Trinidad and Tobago / Piarco ACC	Piarco FIR	ADS-B ADS-C (*)	Planned		Studies are being carried out *Oceanic East Sector
6	United States/ Houston ARTCC Miami ARTCC	Golf of Mexico (Central zone between Houston Oceanic and Mexico FIRs) Miami Oceanic FIR (Domestic Zone)	ADS-B ADS-B	Planned Planned		Based on an agreement Mexico - USA
7	COCESNA/ Cenamer ACC	Cenamer FIR (Caribbean and Pacific Oceanic sectors)	ADS-B	Study		Studies are being carried out
8	Argentina	Ezeiza FIR Oceanic Zone	ADS-C	Planned		Planned to be implemented at the end of first trimester of 2007
9	Brasil/ Atlântico ACC	Atlântico FIR	ADS-C	Planned		Planned to be fully implemented at the end of second trimester of 2009

Nb	State or Organization/ Center	Air Space	ADS Type	Status	Impl. Date	Remarks
10	Chile/ Chile´s ACC	Chile FIR (Continental and Oceanic air Space)	ADS-C	Study		

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APPENDIX Q

ACTIVITIES TO BE CONSIDERED FOR ADS-B TRIAL

Activities to be considered for ADS B Trial

Five main topics should be considered by the States that are interested in performing some trials on ADS-B, which are:

- Planning Function
- Expected Criteria
- Test Parameters
- Trial Limitation
- Results Dissemination

Planning Function

There's a need to develop a Concept of Operations (CONOPS), in which the scope has to be clearly stated and what the operational requirements are, as well as the issues that have to be addressed (e.g. efficiency improvement, fuel savings, capacity enhancement, etc.)

The above mentioned CONOPS should also define what kind of service will be provided in the trial area (e.g. radar like service) and the complete schedule to perform the actions required, from planning to final report.

All stakeholders should be identified and brought to the program by promoting some user and customer conferences, to discuss the contents of the CONOPS and present the benefits of new technologies. It is also important to have some Airline candidates to commit and be part of the program from the beginning.

Expected Criteria

- The migration for an ADS-B environment should be cost effective;
- The use of the new technology must provide some safety benefit;
- The trial must be concluded in a reasonable time frame;
- The Air Navigation Service providers (ANSP) must get full commitment from users and regulators before the beginning of activities;
- It is important to have some radar coverage (at least partial) over the trial area to validate ADS-B position reports;
- A performance baseline for the designated areas of trials (e.g. existing routes) should be established to make future comparisons possible;
- A Cost Benefit analysis (CBA) should be performed for the customers by the ANSP; and
- Data collection should be performed and a safety case based on that data should be presented to regulators.

Test parameters

- The update rate of the prototype system should be measured and compared to the expected rate, depending on the designated airspace (en-route, TMA, ground);
- The accuracy of the system should be evaluated by comparison with a known legacy system (e.g. secondary radars);
- The performance of the system should be monitored, in terms of NUC (for D260 compatible avionics) or Navigation Integrity Category (NIC), Navigation Accuracy Category (NAC), System Integrity Level (SIL) (for D260A compatible avionics);
- The probability of reception should also be measured over a very large sampling of flights;
- The flight ID sent by any aircraft should be assessed by the technical teams;
- The overall service availability must be measured and determined. Anomalies of all types shall be recorded and analyzed.

Trial Limitations

- The trials should be limited to ADS-B out only;
- There is a need to validate the performance of the existing communication infrastructure;
- The spectrum within the trial area should be monitored in order to make sure that the frequency 1090MHz won't be affected for the legacy systems that are currently deployed;
- It is desirable to have a monitoring system for the health of the GPS constellation to validate its performance during the test event.

Results dissemination

During the trial processes, a dedicated team should be assigned to collect, organize and analyze data that will be used to write a complete report of the ADS-B trial results and to submit that report to GREPECAS through the Surveillance Task Force. These results and data should be sent to the Rapporteur of the Surveillance Task Force.

APPENDIX R

CONSIDERATIONS FOR STATES/TERRITORIES/INTERNATIONAL ORGANIZATIONS TO CARRY OUT ADS-B TRIALS WITH THE FAA

The CAR/SAM State makes an official request via memorandum, e-mail, or fax to "The Federal Aviation Administration (Office of International Aviation, AWH-10,800 Independence Ave. S.W., Washington D.C." (202) 267-5032 --Fax).

The FAA and the CAR/SAM State develop a bilateral agreement that both parties to sign.

Timelines established in accordance to terms of bilateral agreement.

Start of the activities.

Roles and Responsibilities:

The U.S. FAA will:

a) Following request from a Civil Aviation Authority (CAA), negotiate and enter into a bilateral agreement;

b) Provide analysis and technical assistance to explore Surveillance and Broadcast Services solutions and benefits; and

c) Provide a service provider option for the participating State to procure surveillance services.

The CAR/SAM States/Territories/International Organizations:

a) Establish a bilateral agreement with the United States;

b) Provide ground-based surveillance technology;

c) Provide infrastructure necessary to install ground stations in suitable geographic locations; the infrastructure will include telecommunications, power, and equipment shelters;

d) Collect and record ADS-B messages from aircraft transitioning, departing, or landing at various airports; and

e) Participate in data reduction and analysis.

APPENDIX S

**SAMPLE AERONAUTICAL INFORMATION CIRCULAR (AIC)
RECOMMENDED TEXT OF STATE AIC**

Notes	ICAO 24-Bit Aircraft Addresses and Aircraft Identification Reporting
1. State to insert date and reference of last circular issued for Mode S Surveillance, if applicable	**1. INTRODUCTION** 1.1 The provision of air traffic services (ATS) using SSR Mode S will rely on a unique ICAO 24-bit aircraft address for selective interrogation of individual aircraft. The 24-bit aircraft address is also an essential element of the airborne collision and avoidance system, ACAS II. In addition, Mode S surveillance requires the reporting of aircraft identification as stated in previous circulars concerning Mode S airborne equipment requirements. (note 1). 1.2 The aircraft address shall be one of 16 777 214 twenty-four-bit aircraft addresses allocated by ICAO to the State of Registry or common mark registering authority and assigned as prescribed in the Appendix to Chapter 9, Part I, Volume III, ICAO Annex 10. 1.3 All Mode S equipped aircraft engaged in international civil aviation are required to have an aircraft identification feature as prescribed in ICAO Annex 10, Volume IV, Chapter 2, 2.1.5.2. 1.4 This circular provides guidance to ensure consistency regarding 24-bit aircraft addresses and the reporting of aircraft identification relevant to the operational introduction of Mode S Elementary and Enhanced Surveillance. In particular: a) Adherence to the world-wide scheme for assignment of ICAO 24-bit Aircraft Addresses. b) Correct setting of Aircraft Identification by flight crew.
2. Insert name of State and title of applicable organization responsible for 24-	**2. THE ICAO 24-BIT AIRCRAFT ADDRESS** 2.1 Instances occur of incorrect 24-bit aircraft addresses being installed/hard-wired on individual aircraft. This has happened not only on first installation of a Mode S transponder but also when a major modification has been made to the Mode S equipment, and following a change of State of Registration. Incorrect installation, such as setting the address to all zeros, or, inadvertent duplication of an address can pose a severe risk to flight safety. In particular, the airborne collision avoidance system, ACAS II, performs on the assumption that only a single, unique 24-bit aircraft address per airframe exists. The performance of ACAS II can be seriously degraded and in some instances disabled if an incorrect or duplicate address is installed on an aircraft. 2.2 Incorrect or duplicated 24-bit aircraft addresses will also undermine the effectiveness of surveillance services based on SSR Mode S. 2.3 It is essential that aircraft operators comply with the aircraft address assignment procedures of the State regulatory authority to which blocks of addresses have been allocated by ICAO (note 2). 2.4 The world-wide addressing scheme has been designed so that, at any

Notes	ICAO 24-Bit Aircraft Addresses and Aircraft Identification Reporting
bit aircraft address assignment	one time, no address is assigned to more than one aircraft. Only one address can be assigned to an aircraft and it cannot be changed except under exceptional circumstances authorized by the State regulatory authority concerned.
	2.5 When an aircraft changes its State of Registry, the previously assigned address is to be relinquished and a new address assigned by the new registering authority.
	2.6 It is essential that the aircraft address is periodically verified using ramp tests. Such checks must also be conducted when a major maintenance check has taken place and when the aircraft has changed registration, to ensure that a newly assigned address has been properly set.
	3. CORRECT SETTING OF AIRCRAFT IDENTIFICATION 3.1 To comply with European airborne equipment requirements, Mode S transponder equipped aircraft must incorporate an Aircraft Identification Feature. Correct setting of aircraft identification is essential for the correlation of radar tracks with flight plan data in the ATM and Airport Operator ground systems. Initial operational trials using SSR Mode S have shown that many aircraft are transmitting incorrect aircraft identification, e.g. BC_1234 instead of ABC1234. Such erroneous settings of aircraft identification prohibit automatic flight plan correlation and, if perpetuated, will severely limit the effectiveness of Mode S to relieve the shortage of SSR codes. 3.2 In accordance with ICAO Doc 8168 *[PANS-OPS]* Vol. I, Part VIII, 1.3, flight crew of aircraft equipped with Mode S having an aircraft identification feature shall set the aircraft identification in the transponder. This setting shall correspond to the aircraft identification specified in item 7 of the ICAO flight plan, or, if no flight plan has been filed, the aircraft registration. 3.3 Aircraft Identification, not exceeding 7 characters is to be entered in item 7 of the flight plan and set in the aircraft as follows: Either, a) The ICAO three-letter designator for the aircraft operating agency followed by the flight identification (e.g. KLM511, BAW213, JTR25), when: in radiotelephony the callsign used consists of the ICAO telephony designator for the operating agency followed by the flight identification (e.g. KLM 511, SPEEDBIRD 213, HERBIE 25). Or, b) The registration marking of the aircraft (e.g. EIAKO, 4XBCD, OOTEK), when: 1) in radiotelephony the callsign used consists of the registration marking alone (e.g. EIAKO), or preceded by the ICAO telephony designator for the operating agency (e.g. SVENAIR EIAKO), 2) the aircraft is not equipped with radio. Note 1 No zeros, dashes or spaces are to be added when the Aircraft

Notes	ICAO 24-Bit Aircraft Addresses and Aircraft Identification Reporting
	Identification consists of less than 7 characters. Note 2 Appendix 2 to ICAO Doc 4444 *[PANS-ATM]*, refers. ICAO designators and telephony designators for aircraft operating agencies are contained in ICAO Doc 8585.
3. State to insert local points of contact	**4. FURTHER INFORMATION** Further information or guidance may be obtained from: DGAC contact information or Website.

Agenda Item 4 Regional air navigation deficiencies

4.1 Reports of the ASB/8 and ASB/9 Meetings

4.1.1 The Meeting noted that the main purpose of the ASB/9 Meeting had been to discuss the implementation of Draft Conclusion ASB/8/1 and Draft Decision ASB/8/2 formulated by the ASB/8 Meeting. Both actions were approved by GREPECAS through the "fast track" mechanism. In this regard, a report was presented at the ASB/9 Meeting on the work carried out by the ASB/8, which was convened in keeping with GREPECAS Decision 14/60, in which the following was noted:

a) The Meeting reviewed the work carried out by the Secretariat in relation to the improvements introduced to the GANDD, which included a complete revision of the method to capture and store information in the database, as well as the reformulation of the reports provided by the database. In this regard, Appendices A, B, C and D were eliminated, and it was agreed to report unresolved deficiencies in one format only and maintain corrected deficiencies only for statistical purposes.

b) The documentation prepared by the Secretariat concerning procedures for classifying and addressing GREPECAS "U" deficiencies was reviewed. It was noted that these procedures supported the application of the Uniform Methodology for the Identification, Assessment and Reporting of Deficiencies approved by ICAO Council, which contained criteria to determine whether or not a "U" deficiency existed.

Note: Concerning the Procedures for Classifying and Addressing GREPECAS "U" Deficiencies, the ASB/9 Meeting considered expanding same for all deficiencies.

c) The Meeting considered the criteria for classifying "U" deficiencies using the ICAO SMS Risk Assessment Model. According to these criteria, risk indices 5A, 5B, 5C, 4A, 4B and 3A corresponded to priority "U" deficiencies. In this regard, the ASB/8 Meeting formulated Conclusion ASB/8/2 in order that States/Territories and International Organizations carry out a risk analysis for presentation to the ICAO Regional Offices for documentation at the ASB/9 Meeting. It was noted that the "last resort action" indicated by GREPECAS Conclusion 13/92 was subject to the work to be performed under directive of Conclusion ASB/8/2. The ASB/8 Meeting also considered the possibility of expanding the criteria being used for "U" deficiency risk assessment to type "A" and "B" deficiencies. By means of formulating Decision ASB/8/1, the Secretariat was requested to carry out an analysis on this matter for presentation at the ASB/9 Meeting. Conclusion ASB/8/2 and Decision ASB/8/1 appear in **Appendix A** to this part of the Report.

d) Concerning GREPECAS Conclusion 14/59 - *National Coordinator responsible for updating the GANDD*, the Meeting was informed of the available list of contacts, which is updated by the Secretariat as required.

Review of the results of the classification of "U" deficiencies per Conclusion ASB/8/2

4.1.2 The Meeting reviewed the implementation of Conclusion ASB/8/2. In this regard, the Meeting noted that due to an involuntary error the list of "U" deficiencies had been circulated only to States/Territories and not to IATA and IFALPA as directed by the mentioned conclusion. It was noted that the replies to the exercise received from the CAR States in assessing risk were very good, allowing for risk assessments to be carried out for all CAR "U" deficiencies. Concerning the SAM Region, it was noted that few States had performed the exercise.

4.1.3 The valuable contribution that IATA and IFALPA could make concerning deficiency risk assessment was pointed out. Therefore, the Meeting was of the opinion to continue the exercise with the participation of IATA and IFALPA. It was agreed that the States that had been not yet performed the actions contained in Conclusion ASB/8/2 complete the exercise. IATA and IFALPA requested clarification regarding their participation and the methodology to perform the risk assessment. After explanation provided by the Meeting, it was agreed that IATA and IFALPA, using the information provided by ICAO (also available in the GANDD), perform the risk assessment and provide the information to the respective ICAO Regional Office as soon as possible and, in any event, not later than 1 March 2009.

4.1.4 Based on the above, the Meeting was of the opinion that a special ASB Meeting should be convened to analyze the results of the exercise to be performed by IATA, IFALPA and the remaining States. In this regard, the following conclusion was formulated:

CONCLUSION 15/47 FURTHER ACTIONS TO IMPLEMENT CONCLUSION ASB/8/2

In order to complete Conclusion ASB/8/2 that:

a) immediately after the GREPECAS/15 Meeting, the ICAO Regional Offices forward to IATA and IFALPA the list of "U" air navigation deficiencies currently available in the GANDD;

b) States that have been not yet done so carry out the "U" deficiency risk assessment and submit results to the accredited Regional Office not later than 5 January 2009;

c) IATA and IFALPA carry out the "U" deficiencies risk assessment and submit the results to the ICAO Regional Offices not later than 1 March 2009; and

d) ICAO conduct a special ASB Meeting at the NACC Regional Office in Mexico City in April 2009, to analyze the results of the completed exercise.

4.1.5 The Meeting noted that the ICAO Regional Offices, following the Uniform Methodology approved by the Council, would use the information provided by the States/Territories, IATA and IFALPA to prioritize the deficiencies (par. 2.1.1 f) per the Uniform Methodology.

Analysis of the standard classification of "A" and "B" air navigation deficiencies

4.1.6 The Meeting reviewed the implementation of Decision ASB/8/1. In this regard, it was noted that GREPECAS had developed criteria for the classification of "U" deficiencies using the current SMS Risk Analysis Model, and that by the above-mentioned Decision, the Secretariat had been requested to carry out an analysis to expand the use of these criteria to the classification of "A" and "B" deficiencies. In this respect, the Secretariat presented the analysis to the Meeting, which was supported as follows:

a) the ICAO SMS Risk Analysis Model is applicable only to those situations involving matters affecting the safety of air operations;

b) an "A" deficiency is defined as a deficiency with high priority requirements necessary for air navigation safety; and

c) a "B" deficiency is defined as a deficiency with intermediate requirements necessary for air navigation regularity and efficiency.

4.1.7 Based on the above facts, the Secretariat analysis concluded that other than the elements of the SMS Risk Analysis Model considered for classification of "U" deficiencies (elements 5A, 5B, 5C, 4A, 4B and 3A), the remaining elements could be used to classify "A" deficiencies. Therefore, upon analyzing a deficiency affecting safety using the SMS model, it is noted that a deficiency not related to the risk indices associated with type "U" could be classified as an "A" deficiency, and matters affecting regularity and efficiency of the air operations could be classified as a "B" deficiency.

4.1.8 Extensive exchange of views concerning this matter occurred. In this regard, it was noted that considering the SMS risk management criteria, there existed elements where there was an acceptable level of risk and the risk could be managed so as to be negligible. However, considering the criteria of the Uniform Methodology approved by the Council, the deficiency exists and, therefore, should be classified. Considering this fact, the Meeting was of the opinion that the SMS model should subsequently be used only as a tool to classify deficiencies affecting safety, i.e., "U" or "A" according to the Uniform Methodology approved by the Council. The Meeting recognized that improvements could be made regarding the classification criteria; however, it was the opinion of the Meeting that it was more important to put the mentioned criteria into practice and obtain experience with its application.

4.1.9 Based on the above, the Meeting approved the use of the ICAO SMS Risk Assessment Model, contained in **Appendix B** to this part of the Report, for use in "U" "A" and "B" deficiency classification.

4.1.10 The Meeting reviewed a proposal to amend the Uniform Methodology approved by the Council in order to provide State/Territories with a procedure, which would allow 7 working days to provide comments to ICAO Regional Offices in order to verify newly identified deficiencies prior to being entered into the GANDD. The Secretariat explained that a better option than a proposal for amendment to the Uniform Methodology would be to introduce this procedure in the supplementary procedures for classifying and addressing GREPECAS "U" deficiencies, as indicated in par. 2.1 b) above, so as to include this matter as an additional procedure.

4.1.11 In considering the proposal, it was noted that the supplementary procedures indicated above were only developed in light of the need to resolve the problem of "U" deficiencies; however, and considering that the deficiency classification procedures could now be applied for all deficiencies, the following conclusion was formulated:

CONCLUSION 15/48 REFINEMENT OF PROCEDURES FOR CLASSIFYING AND ADDRESSING DEFICIENCIES

That ICAO:

a) refine the procedures developed during the ASB/8 Meeting for classifying and addressing "U" deficiencies for all deficiencies, and include in same a procedure to include a 7-working day comment period for State/Territories to verify the data concerning newly identified deficiencies with the accredited ICAO Regional Office before the deficiency is entered into the GANDD; and

b) present the results to the next ASB Meeting.

4.2 Specific air navigation planning and implementation deficiencies in the CAR/SAM Regions

4.2.1 Under this agenda item, the Meeting recalled that existing deficiencies affecting the provision of air navigation services in the ICAO Regions and the need for the States/Territories to implement programmes to resolve them are a matter of constant concern and high priority for the ICAO Council. It was also recalled that an important element of the ICAO Global Aviation Safety Plan (GASP), approved through Assembly Resolution A33-16, is the need to improve the identification and resolution of air navigation deficiencies in order to take specific actions for their deletion.

4.2.2 The Meeting took note of Conclusion 14/59 - *National Coordinator Responsible for updating the GREPECAS Air Navigation Deficiency Database.* In order to facilitate administrative coordination of the GREPECAS Air Navigation Deficiency Database (GANDD) with those responsible in each area of air navigation service of the States/Territories, the Secretariat prepared a list of National Coordinators responsible for updating the GANDD, which is presented as **Appendix C** to this part of the Report.

4.2.3 **Appendix D** to this part of the Report presents outstanding air navigation field "A" and "B" deficiencies corresponding to the CAR Region and **Appendix E** presents the same data corresponding to the SAM Region.

APPENDIX A

DRAFT CONCLUSION AND DECISION FORMULATED BY THE ASB/8 MEETING

DRAFT
DECISION ASB/8/1* STANDARD CLASSIFICATION TO AIR NAVIGATION DEFICIENCIES

That, the Secretary of GREPECAS:

a) analyze the feasibility of applying the new classification procedure for "U" type deficiencies to classification of "A" and "B" air navigation deficiencies; and

b) present the results of the analysis indicated in letter a) to ASB/9.

DRAFT
CONCLUSION ASB/8/2* CLASSIFICATION OF "U" DEFICIENCIES

That:

a) GREPECAS "U" type deficiencies be sent to States/Territories and International Organizations (IATA and IFALPA) to carry out a risk analysis assessment for each "U" deficiency and the aspects of the uniform methodology approved by the Council;

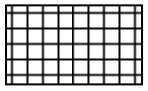
b) States/Territories and International Organizations should determine the Risk Index for each deficiency according to the ICAO SMS methodology for risk assessment (the respective matrix is represented by **Appendix D** to this Report) using the format presented as **Appendix E** to this Report; and

c) The Secretary of GREPECAS present the results of the analysis mentioned in a) and b) to the ASB/9 Meeting scheduled previous to GREPECAS/15 Meeting.

APPENDIX B

METHODOLOGY FOR DETERMINING THE THREE PRIORITY LEVELS FOR AIR NAVIGATION DEFICIENCIES (U/A/B) ON THE BASIS OF RISK INDEX

Risk probability		Risk severity				
		Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
Frequent	5	5A	5B	5C	5D	5E
Occasional	4	4A	4B	4C	4D	4E
Remote	3	3A	3B	3C	3D	3E
Improbable	2	2A	2B	2C	2D	2E
Extremely improbable	1	1A	1B	1C	1D	1E



"U" type deficiencies correspond to the shadowed area of this matrix (Risk Indexes: 5A, 5B, 5C, 4A, 4B and 3A)

"A" type deficiencies correspond to all the remaining risk indexes

"B" type deficiencies are not safety related and do not correspond to any of the above risk indexes

APPENDIX C

COORDINADORES NACIONALES GANDD / GANDD NATIONAL COORDINATORS

REGION CAR / CAR REGION

Estado / State	Coordinador / Coordinator	Dirección e-mail / E-mail address
Anguilla (U. K.)		
Antigua & Barbuda	Rosemond James	oecs.dca@candw.ag
Antillas Francesas / French Antilles	Roger Gabriel Prudent	roger-gabriel.prudent@aviation-civile.gouv.fr
Antillas Neerlandesas / Netherlands Antilles	Vilmo Pieter	vilmo.pieter@gov.an
Aruba	Louis Reed	louis.reed@aruba.gov.aw
Bahamas	Wendy Major	wendymajor@bahamas.gov.bs
Barbados	David Brones	civilav@sunbeach.net
Belice / Belize	J.A. Contreras	dcabelize@btl.net
Bermuda	Rosemond James	oecs.dca@candw.ag
Costa Rica	Luis Gustavo González Trigo	ggonzalez@dgac.go.cr
Cuba	Iraida Alfonso	iraida.alfonso@iacc.avianet.cu
Dominica	Rosemond James	oecs.dca@candw.ag
El Salvador	Mauricio E. Rivas Rodas	navegacion-aerea@acc.gob.sv
Estados Unidos / United States	Mayte Ashby	mayte.ashby@faa.gov
Granada / Grenada	Rosemond James	oecs.dca@candw.ag
Guatemala	Carlos Urizar	carouriz@yahoo.com
Haiti	Jacques Boursiquot	jboursiquot@ofnac.org
Honduras	Geovany Sauceda	gsauceda@yahoo.com
Islas Caimanes / Cayman Islands	Richard Smith	richard.smith@caacayman.com
Islas Turcas y Caicos / Turks and Caicos Is.	Thomas Swann	tswann@gov.tc
Islas Vírgenes Br / Virgin Islands Br	Margaret Wilson	margaret.wilson@caribairsafety.aero
Jamaica	Patrick Stern	dans@jcca.gov.jm
Mexico	José Javier Roch Soto	jjrochso@sct.gob.mx
Montserrat	Margaret Wilson	margaret.wilson@caribairsafety.aero
Nicaragua	Carlos Salazar	dg@inac.gob.ni

Estado / State	Coordinador / Coordinator	Dirección e-mail / E-mail address
República Dominicana / Dominican Republic	Santiago Rosa	subdireccion_sna@idac.gov.do
St Kitts & Nevis	Rosemond James	oecs.dca@candw.ag
St. Vincent and The Grenadines	Alastair Alexander	ETJoshua@caribsurf.com
Santa Lucía / St. Lucia	Rosemond James	oecs.dca@candw.ag
Trinidad y Tabago / Trinidad and Tobago	Randy Gomez	rgomez@caa.gov.tt

REGION SAM / SAM REGION

Estado / State	Coordinador / Coordinator	Dirección e-mail / E-mail address
Argentina	Eduardo Rodino	buecrucga@faa.mil.ar
Bolivia	Daniel Navajas Orellana Jefe de la Unidad de Infraestructura Aeroportuaria	dnavajas@dgac.gov.bo
Brasil / Brazil	Paulo Jorge de Medeiros Vieira Asesor de la CERNAI	asscernai1@decea.gov.br
Chile	Jesús Sánchez Cvitanic Jefe Sección Navegación Aérea del Departamento Planificación	jsanchez@dgac.cl
Colombia	Grupo de Proyectos Internacionales	sparis@aerocivil.gov.co nsanchez@aerocivil.gov.co
Ecuador	Bolívar Dávalos Cárdenas	bolivar_davalos@dgac.gov.ec bolodavalos@hotmail.com
Guyana Francesa / French Guiana	Catherine Arnaud	catherine.arnaud@aviation-civile.gouv.fr
Guyana / Guiana	Director Air Navigation Services	dans@gcaa-gy.org
Panamá		
Paraguay	Hernán Jhonny Colman Gerente de Navegación Aérea	gna@dinac.gob.py
Perú	Raymundo Hurtado Paredes Inspector de Navegación Aérea	rhurtado@mtc.gob.pe
Surinam		
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OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIA Anguilla										
AIS 43 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Anguilla	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State		Obstacles determination
AIS 106 CAR	Annex 15 Chap. 8; Doc. 8733 Basic ANP, Part VIII, Para. 25; FASID Tables AIS 1 and 2	Anguilla	Pre- flight information/(implementation of required AIS aerodrome units).	SEP/ 1996	Records/files NACC RO; no action plan reported.	B	Need for effective implementation of required AIS aerodrome units.	State		
AIS 120 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Anguilla	Aerodromes, Air Routes and Ground Aid	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 142 CAR	Annex 4 Chap. 16 Append. 5. FASID Table AIS 7.	Anguilla	Production of the world aeronautical charts-ICAO not according to the sheet layout index established for this series of chart.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the established requirements.	State		
AIS 183 CAR	Annex 4Chap. 17.	Anguilla	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the ICAO specifications.	State		
AIS 242 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Anguilla	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for effective production of this series of aeronautical charts.	State		
AIS 327 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Anguilla	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	OCT/ 2007	
AIA Anguilla										

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
MET 7 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	Anguilla	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49	JUN/ 1996	Review the functions and training of the aeronautical meteorologist.	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	State		
MET 58 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Anguilla	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B.	JUN/ 1996	Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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1	2	3	4	5	6	7	8	9	10	11
ATG Antigua and Barbuda										
AGA 90 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4, 3.3.4, 3.4.6 & 15)	Antigua and Barbuda, ST. JOHNS, V. C. Bird Intl	Runway strip width is insufficient and contains objects in the following areas: West and east runway ends – concrete pits East runway end – fence, road & sea West runway end north side – fence, road, terrain, vegetation & buildings North side – apron, parallel taxiway and closed runway used for parking aircraft Central portion south side – fence & terrain	JUL/ 2001	ICAO Visit July 2001	A	Remove or modify objects located in the runway strip and widen the runway strip. Reduce the runway declared distances by approximately 100 m. Action Plan: Development of new apron planned.	Antigua and Barbuda Ministry of Aviation	DEC/ 2005	Pending the availability of funding for completion of Phase I of Master Plan.
AGA 91 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 3.5, 3.5.1 & Rec. 5.11)	Antigua and Barbuda, ST. JOHNS, V. C. Bird Intl	Runway end safety areas are not provided at both runway ends: East runway end – fence, road & sea West runway end – fence & grading	JUL/ 2001	ICAO Visit July 2001	A	Provide east RESA by reducing the Runway 07 declared distances by approximately 90 m.Do not declare stopway, thereby bringing the runway strip end and RESA 60 m closer to the west runway end and prepare and grade the surface for a RESA.	Antigua and Barbuda Ministry of Aviation	DEC/ 2003	
AGA 92 CAR	Taxiway Parallel to Runway (ANP, Table AOP1, Annex 14, Vol. I, Chap. 3.9.8 & 3.9.12)	Antigua and Barbuda, ST. JOHNS, V. C. Bird Intl	No parallel taxiway is provided	JUL/ 2001	ICAO Visit July 2001	B	Complete the construction of the parallel taxiway.	Antigua and Barbuda Ministry of Aviation	DEC/ 2004	Pending the availability of funding for completion of Phase I of Master Plan.
AGA 93 CAR	Obstacles (Annex 14, Vol. I , Chap. 4, Rec. 4.2.12 & 27)	Antigua and Barbuda, ST. JOHNS, V. C. Bird Intl	Vehicles on the public road at the east runway end are obstacles infringing on the Runway 07 take-off climb and Runway 25 approach and transitional obstacle limitation surfaces	JUL/ 2001	ICAO Visit July 2001	A	Reduce the runway declared distances or implement traffic control system on the public road. Action Plan: Reduce the runway declared distances. Relocation of the road.	Antigua and Barbuda Ministry of Aviation	DEC/ 2004	
AGA 94 CAR	Obstacles (Annex 14, Vol. I , Chap. 4, Rec. 4.2.12)	Antigua and Barbuda, ST. JOHNS, V. C. Bird Intl	Obstacles in the transitional surface include aircraft parked on the apron and topography on both north and south sides of west runway end	JUL/ 2001	ICAO Visit July 2001	A	Reduce the obstacles infringing on the transitional surface. Action Plan: New apron development planned. Published in AIP.	Antigua and Barbuda Ministry of Aviation	DEC/ 2005	Pending the availability of funding for completion of Phase I of Master Plan.
AGA 96 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.4.1.1)	Antigua and Barbuda, ST. JOHNS, V. C. Bird Intl	No airfield signs are provided	JUL/ 2001	ICAO Visit July 2001	A	Provide illuminated airfield signs	Antigua and Barbuda Ministry of Aviation	DEC/ 2004	Pending the availability of funding for completion of Phase I of Master Plan.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 98 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2,10.2.1)	Antigua and Barbuda, ST. JOHNS, V. C. Bird Intl	Apron pavement in very poor condition in some areas with extensive loose stones - FOD	JUL/ 2001	ICAO Visit July 2001	A	Remove FOD continuously and repair apron pavement.	Antigua and Barbuda Ministry of Aviation	JUL/ 2004	Pending the availability of funding for completion of Phase I of Master Plan.
AGA 99 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2, 10.2.1 & 10.2.2.)	Antigua and Barbuda, ST. JOHNS, V. C. Bird Intl	Runway pavement surface deficient at the runway ends due to aircraft turn-arounds	JUL/ 2001	ICAO Visit July 2001	A	Upgrade pavements at runway ends	Antigua and Barbuda Ministry of Aviation	DEC/ 2004	Pending the availability of funding for completion of Phase I of Master Plan.
AGA 101 CAR	Visual Aids (Annex 14, Vol. I, Chap. 10, 10.4, 10.4.10)	Antigua and Barbuda, ST. JOHNS, V. C. Bird Intl	Runway 07 approach lighting system reported to be 50 % serviceable	JUL/ 2001	ICAO Visit July 2001	A	Repair approach lighting system. Action Plan: Replace approach lighting system.	Antigua and Barbuda Ministry of Aviation	JUL/ 2004	Pending the availability of funding for completion of Phase I of Master Plan.
ATG Antigua and Barbuda										
AIS 169 CAR	Annex 4Chap. 17.	Antigua and Barbuda	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the ICAO specifications.	State		
AIS 312 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Antigua and Barbuda	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State		
ATG Antigua and Barbuda										
MET 6 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	Antigua and Barbuda	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49.	JUN/ 1996	Review the functions and training of the aeronautical meteorologist	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology. Action Plan: The World Meteorological Organization, in coordination with ICAO, is seeking a solution to offer courses and seminars in aeronautical meteorology.	State		
MET 44 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	Antigua and Barbuda	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies.	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance.	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements. Action Plan: This deficiency still remains.	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
MET 59 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Antigua and Barbuda	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B	JUN/ 1996	a) To implement the SIP COM/MET Recommendations for the CAR Region, b) to make use for the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	State		The deficiencies in the OPMET exchange remain. An AFTN terminal is required at the MET Office

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
ABW Aruba										
AGA 296 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 10, 10.2 & 10.2.1)	Aruba, ORANJESTAD, Reina Beatrix Int'l	No runway end safety areas are provided at both runway ends	JAN/ 2003	ICAO Visit January 2003	A	Provide runway end safety areas by not declaring stopways, extension and/or displacing the runway ends and reducing the runway declared distances.	Aruba Airport Authority		Compliance with the standard will have significant structural and financial implications on the infrastructure of the airport. Several factors such as land acquisition, construction in the sea and the impact here-of on the community demand extensive study to arrive at the final decisions.
AGA 297 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.2.10, 5.10.1, 5.10.2 & 5.10.4)	Aruba, ORANJESTAD, Reina Beatrix Int'l	The runway-holding position on the south side of the runway is provided on the GA apron. The old runway-holding position markings on Taxiways D, E and F are no longer valid.	JAN/ 2003	ICAO Visit January 2003	A	Remove the disused runway-holding position markings on Taxiways D, E and F. Action Plan: The old runway-holding position markings on taxiways D, E and F will be removed.	Aruba Airport Authority	JUN/ 2003	
AGA 298 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.2.8, 5.2.8.1 & 3)	Aruba, ORANJESTAD, Reina Beatrix Int'l	Taxiway centreline marking to guide aircraft turning around at the east runway end is not provided	JAN/ 2003	ICAO Visit January 2003	A	Provide turn-around guidance centreline markings at the runway end. Action Plan: Turn-around guidance centerline marking at the east runway end will be provided.	Aruba Airport Authority	JUN/ 2003	
AGA 299 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - Std. 5.3.4.1.B)	Aruba, ORANJESTAD, Reina Beatrix Int'l	No approach lighting system is provided on Runway 29	JAN/ 2003	ICAO Visit January 2003	A	Provide a simple approach lighting system on Runway 29	Aruba Airport Authority		Compliance with the standard will have significant structural and financial implications on the infrastructure of the airport. Several factors such as land acquisition, construction in the sea and the impact here-of on the community demand extensive study to arrive at the final decisions.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AGA 300 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.4, 5.3.4.1.C & Doc. 8733 ANP FASID Table AOP1)	Aruba, ORANJESTAD, Reina Beatrix Int'l	A simple approach lighting system is provided on Runway 11	JAN/ 2003	ICAO Visit January 2003	A	Provide a precision approach category I lighting system on Runway 11	Aruba Airport Authority		Compliance with the standard will have significant structural and financial implications on the infrastructure of the airport. Several factors such as land acquisition, construction in the sea and the impact here-of on the community demand extensive study to arrive at the final decisions.
AGA 301 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.15 &5.3.15.1)	Aruba, ORANJESTAD, Reina Beatrix Int'l	No stopway lights are provided at both runway ends	JAN/ 2003	ICAO Visit January 2003	A	Provide stopway lights or do not declare stopways and amend runway declared distances	Aruba Airport Authority		Compliance with the standard will have significant structural and financial implications on the infrastructure of the airport. Several factors such as land acquisition, construction in the sea and the impact here-of on the community demand extensive study to arrive at the final decisions.
AGA 302 CAR	Visual Aids (Annex 14, Vol. I, Chap. 7, 7.1.1)	Aruba, ORANJESTAD, Reina Beatrix Int'l	No closed marking is provided on the eastern section of Taxiway F/D extension	JAN/ 2003	ICAO Visit January 2003	A	Provide closed marking for closed section of Taxiway F. Action Plan: Closed markings will be provided for closed section of Taxiway F.	Aruba Airport Authority	JUN/ 2003	
AGA 303 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap. 9.1 & 2 - Std. 9.2.21 and Rec. 9.2.22, 30 & 31)	Aruba, ORANJESTAD, Reina Beatrix Int'l	RFFS response time was reported to be between 2.5 and 3 minutes. Furthermore, a test alarm from the control tower resulted in a 1.5 minute delay between alarm call and RFFS response	JAN/ 2003	ICAO Visit January 2003	A	Reduce the response time by providing direct access to runway. Improve the alarm system and procedures between the control tower and the RFFS control room and test regularly. Action Plan: Remarks forwarded to Chief Fire Services for comment.	Aruba Airport Authority		
AGA 305 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap.10,10.2, 10.2.1, 10.2.2)	Aruba, ORANJESTAD, Reina Beatrix Int'l	Taxiway G at the western runway end, Taxiways A and B and some apron areas are in very poor condition, i.e. pavement bleeding, cracking, rutting, vegetation growth, open cable trenches, etc.	JAN/ 2003	ICAO Visit January 2003	A	Repair and maintain taxiway and apron surfaces	Aruba		

ABW Aruba

OUTSTANDING DEFICIENCIES

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1	2	3	4	5	6	7	8	9	10	11
AIS 29 CAR	Annex 15, Para. 3.6.4; Annex 4, Para. 2.18; Doc. 8733, Basic ANP, Part VIII, Paras 50 to 58, FASID Table AIS 5	Aruba	Implementation of the WGS-84 is on going	JAN/ 1998	GREPECAS AIS/MAP Subgroup Survey to States	A	Need to implement the WGS-84 Geodetic System	State	NOV/ 2005	Obstacle determination.
AIS 45 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Aruba	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State		Obstacle determination.
AIS 69 CAR	Annex 15, Chapter 4, Paras. 4.2.8 and 4.3.4., Chapter 6; Doc 8733 Basic ANP Part VIII, Paras. 45 to 49	Aruba	Lack of effective compliance with the AIRAC system requirement	NOV/ 1994	Records/files NACC RO; GREPECAS reports. No action plan reported.	A	Need for an effective application of AIRAC requirements	State		
AIS 96 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 9 to 12	Aruba	Lack of highest priority for printing of AIS publications.	SEP/ 1996	Records/files NACC RO; GREPECAS reports	A	Need to provide a higher priority for the printing of AIS publications	State		
AIS 107 CAR	Annex 15 Chap. 8; Doc. 8733 Basic ANP, Part VIII, Para. 25; FASID Tables AIS 1 and 2	Aruba	Pre- flight information/(implementation of required AIS aerodrome units).	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation of required AIS aerodrome units.	State		
AIS 122 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Aruba	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 243 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Aruba	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for effective production of this series of aeronautical charts.	State		
AIS 262 CAR	Annex 4 Chap. 7; Doc 8733 Basic ANP, Part VIII, Paras. 59 d) and 64 4); FASID Table AIS 6	Aruba	Partial application of ICAO requirements for the production of En route Navigation Charts-ICAO.	SEP/ 1996	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Effective application of ICAO requirements for the production of En route chart-ICAO.	State		
AIS 328 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Aruba	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	
ABW Aruba										
CNS 29 CAR	Surveillance Systems (Table CNS 4A)	Aruba/Reina Beatrix APP/Aruba's radar	Communications, Navigation and Surveillance	JUN/ 2000		B	Repair the radar.	Aruba		

OUTSTANDING DEFICIENCIES

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1	2	3	4	5	6	7	8	9	10	11
ABW Aruba										
MET 8 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	Aruba	Meteorology	JUN/ 1996	Review the functions and training of the aeronautical meteorologist.	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	States		
MET 27 CAR	Notify the RVR for CAT I operations (Annex 3, Part I, Chapter 4, Recommendation 4. 6.3.2)	Aruba	RVR have not been implemented	JUN/ 1996	Plan the acquisition of the RVR	B	To ensure the implementation of required RVR.	State		
MET 45 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	Aruba	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance.	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements.	States		
MET 60 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Aruba	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B.	JUN/ 1996	Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	States		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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1	2	3	4	5	6	7	8	9	10	11
BHS Bahamas										
AGA 36 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 and ANP, Table AOP 1)	Bahamas, FREEPORT, Grand Bahama Intl	No approach lighting systems are provided as required in the CAR/SAM ANP FASID and Annex 14 Vol. I Section 5.3.4.1	OCT/ 2000	ICAO Visit October 2000	A	Provide approach lighting systems	Bahamas	SEP/ 2004	
AGA 39 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 and ANP, Table AOP 1)	Bahamas, NASSAU, Nassau Intl.	RWY and TWY markings missing or faded	DEC/ 1996	ICAO Visit October 2000 and May 2002 IFALPA Meeting November 2000	A	Require re-painting	Bahamas	DEC/ 2003	
AGA 59 CAR	Fencing (Annex 14, Vol. I, Chap. 9, 9.10, 9.10.2, 9.10.4 & 9.10.6)	Bahamas, NORTH ELEUTHERA, North Eleuthera	Access of vehicles and animals to the manoeuvring area	DEC/ 1999	IFALPA Meeting November 2000	A	Repair the fence. Implement security measures	Bahamas	OCT/ 2002	
AGA 64 CAR	Rescue and Fire Fighting Service and Airport Emergency Planning (Annex 14, Vol. I, Chap. 9.1 & 9.2, Rec. 9.2.30)	Bahamas, FREEPORT, Grand Bahama Intl	No RFFS facility with direct access to the runway is provided as required in Annex 14 , Vol. I Section 9.2.19, 22, 25 & 26)	OCT/ 2000	ICAO Visit October 2000	A	Provide a RFFS facility with direct access to the runway	Bahamas	MAR/ 2004	
AGA 306 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.2.7.1)	Bahamas, NASSAU, Nassau Int'l	Runway 14/32 has no side stripe markings along part of its length	MAY/ 2002	ICAO Visit May 2002	A	Provide side stripe markings on runways	Bahamas		
AGA 307 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.2.8.1)	Bahamas, NASSAU, Nassau Int'l	Taxiway "05/23" is not provided with centreline markings	MAY/ 2002	ICAO Visit May 2002	A	Provide taxiway centreline markings on Taxiway "05/23"	Bahamas		
AGA 308 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.2.8.7)	Bahamas, NASSAU, Nassau Int'l	The apron taxilane 3 centreline marking has incorrect characteristics	MAY/ 2002	ICAO Visit May 2002	A	Re-paint the apron taxilane 3 centreline markings	Bahamas		
AGA 309 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.2.10.3)	Bahamas, NASSAU, Nassau Int'l	Runway-holding position markings on some taxiways are incorrect in pattern	MAY/ 2002	ICAO Visit May 2002	A	Verify the pattern of runway-holding position markings and correct where necessary	Bahamas		
AGA 310 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - Rec. 5.2.13.1)	Bahamas, NASSAU, Nassau Int'l	Apron safety line markings are not provided	MAY/ 2002	ICAO Visit May 2002	A	Provide apron safety line markings	Bahamas		
AGA 311 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.5.1 & ANP FASID Table AOP1)	Bahamas, NASSAU, Nassau Int'l	Runway 27 is not provided with a visual approach slope indicator system	MAY/ 2002	ICAO Visit May 2002	A	Provide a visual approach slope indicator system on Runway 27	Bahamas		
AGA 312 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.10.9 & 5.3.11.4)	Bahamas, NASSAU, Nassau Int'l	Runway threshold and end lights were observed to be white at one runway end	MAY/ 2002	ICAO Visit May 2002	A	Verify the colour of all airfield lighting and replace with lights of correct colour where necessary	Bahamas		
AGA 313 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.15.1)	Bahamas, NASSAU, Nassau Int'l	Stopway lights are not provided at both ends of Runway 14/32	MAY/ 2002	ICAO Visit May 2002	A	Provide stopway lights or do not declare stopways and reduce Runway 14/32 ASDA declared distances	Bahamas		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 314 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.16.1)	Bahamas, NASSAU, Nassau Int'l	Some taxiways and parts of taxiways are not provided with taxiway edge lights	MAY/ 2002	ICAO Visit May 2002	A	Provide taxiway edge lights on all taxiways used at night	Bahamas		
AGA 315 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.4.1.1)	Bahamas, NASSAU, Nassau Int'l	Signs are not provided on Runway 09/27	MAY/ 2002	ICAO Visit May 2002	A	Provide signs for Runway 09/27	Bahamas		
AGA 316 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - Rec.7.3.1)	Bahamas, NASSAU, Nassau Int'l	Chevron markings are not provided on the pre-threshold paved areas on both runways	MAY/ 2002	ICAO Visit May 2002	A	Provide chevron markings on pre-threshold paved areas on both runways	Bahamas		
AGA 317 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap. 9.1 & 2 - Rec. 9.2.30)	Bahamas, NASSAU, Nassau Int'l	Fire station does not have direct access to the runways	MAY/ 2002	ICAO Visit May 2002	A	Provide the fire station with direct access to the runways	Bahamas		
AGA 318 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2.10.2.1 & 10.2.2)	Bahamas, NASSAU, Nassau Int'l	The runway pavement surfaces are in very poor condition with irregularities, FOD and rubber deposits (Runway 14/32 is in worse condition than Runway 09/27)	MAY/ 2002	ICAO Visit May 2002	A	Upgrade the runway pavements	Bahamas		
AGA 319 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2 10.2.1 & 10.2.2)	Bahamas, NASSAU, Nassau Int'l	The pavement surfaces on some aprons, taxiways and shoulders are in poor condition with irregularities and FOD	MAY/ 2002	ICAO Visit May 2002	A	Upgrade the taxiway and apron pavements and shoulders	Bahamas		
AGA 320 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.22, 5.28)	Bahamas, NASSAU, Nassau Int'l	Runway and taxiway markings are faded	MAY/ 2002	ICAO Visit May 2002	A	Re-paint the runway and taxiway markings	Bahamas		
BHS Bahamas										
AIS 17 CAR	Annex 15, Chapter 3, Paras. 3.1.5 and 3.1.6; Chapter 5, Paras. 5.1.1.1 and Sec. 5.3	Bahamas	Timely distribution of the information through NOTAM	OCT/ 2000	GREPECAS AIS/MAP Subgroup	A	Need to disseminate on time all operational information through NOTAM	State		
AIS 30 CAR	Annex 15, Para. 3.6.4; Annex 4, Para. 2.18; Doc. 8733, Basic ANP, Part VIII, Paras 50 to 58, FASID Table AIS 5	Bahamas	Implementation of the WGS-84 is on going	JAN/ 1998	GREPECAS AIS/MAP Subgroup Survey to States	A	Need to implement the WGS-84 Geodetic System	State	NOV/ 2005	Obstacle determination.
AIS 123 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Bahamas	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan reported. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 313 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Bahamas	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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BHS Bahamas										
ATM 18 CAR	Use of the aeronautical phraseology	Bahamas	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	ATS/SG/9, RO ATM/SAR mission in April 2005.	A	Continuous training and supervision in the use of aeronautical phraseology is required, in accordance with what is stated in Doc 4444 PANS-ATM. Bahamas is implementing the ICAO SARPs.	CAA Bahamas	MAR/ 2009	The Bahamas is in the process of converting to complete ICAO procedures and phraseology.
BHS Bahamas										
CNS 49 CAR	Radio Navigation Aids (Table CNS 3) VOR/DME West End	Bahamas/West End	The VOR/DME stations is recommended in the FASID, but it is not implemented.	JAN/ 2004		B	This station is recommended for the West End Intl. Airport, Grand Bahamas Island.	Bahamas		
BHS Bahamas										
MET 9 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	Bahamas	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49.	JUN/ 1996	Review the functions and training of the aeronautical meteorologist.	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	States		
MET 46 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	Bahamas	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies.	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance.	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements.	States		
MET 61 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Bahamas	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B.	JUN/ 1996	Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	States		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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BRB Barbados										
AGA 160 CAR	Obstacles (Annex 14, Vol. I , Chap. 4, Rec. 4.2.21)	Barbados, BRIDGETOWN, Grantley Adams Intl	Obstacles in the transitional surface include the fire station and hangar on the south side of the runway middle section	SEP/ 2008	ICAO Visits December 2001& May 2008	A	Long-term development planning should consider the relocation of the facilities which are obstacles infringing on the transitional surface. Action Plan: A comprehensive plan to resite the fire station and hangar has been established. Drawings and an action plan for a new fire station have been forwarded to Governent for approval and funding. On approval the action plan will be executed.	Barbados	APR/ 2009	a) Construction of a new ARFF building has started and is due for completion by April 2009. When this building is completed the present structure will be demolished and removed. An adequate and direct approach to the runway will also be provided. b) The maintenance hangar owned by the Barbados Light Aeroplane Club has been earmarked for removal over the medium/term. No repairs or extensions are permitted to the building and it has been painted as an obstruction. It is intended that this structure will be removed as soon as possible, but an exact date cannot be given at this time. c) The NDB antennae mast will be removed by April 2009 when the NDB is expected to be decommissioned. This mast is however appropriately painted and lighted. It is a navigation aid that is presently used. d) The pole in the area of the 09 threshold at present provides electricity to two homes that are scheduled for relocation. There is, however, no definitive information on a date for the relocation to be accomplished. Consequently a quotation is being sought to have the service buried and the pole removed. It is expected to have the pole removed by the end of October 2008

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 162 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.17, 5.3.17.1)	Barbados, BRIDGETOWN, Grantley Adams Intl	No taxiway edge lighting is provided for the apron taxiway and the east runway end turn-around area	DEC/ 2001	ICAO Visits December 2001& May 2008	A	Provide taxiway edge lighting. Action Plan: Taxiway edge lighting is provided on the south side of the taxiway. However, the north side of the taxiway has not been let since it coincides with the parking apron. The turn-around area form part of the RWY 09 end and the beggining/threshold of RWY27. The necessary runway end and threshold lighting are already employed in this area. There are no plans to implement further lighting. Only the circular section for the turn-around has been let with edge lights.	Barbados		Remains for the time being.
AGA 163 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap. 9.2, Rec. 9.2.27 & 30)	Barbados, BRIDGETOWN, Grantley Adams Intl	Access from rescue and fire-fighting services facilities to the runway is not the most direct, is narrow and pavement is deficient with potholes. There is a lack of training and participation in live fire drills for all rescue and fire fighting personnel.	SEP/ 2008	ICAO Visits December 2001& May 2008	A	Improve access to the runway by paving a fillet on the grassed area in front of the RFFS facility, widen the access road and maintain the pavement surface to ensure minimum response times to both runway ends. All ARFF personnel shall be properly trained to perform their duties in an efficient manner and shall participate in live fire drills commensurate with the types of aircraft and equipment in use at the aerodrome.	Barbados	JUN/ 2009	Required training is planned for airport fire fighting personnel within the next twelve months. A new live burning area is being developed and will be completed by the time the new ARFF building is completed
AGA 164 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2 & 10.2.1)	Barbados, BRIDGETOWN, Grantley Adams Intl	Apron pavement is in very poor condition in some areas with potholes, loose stones – FOD and open joints	SEP/ 2008	ICAO Visits December 2001& May 2008	A	Remove FOD continuously. The apron needs to be repaired at some parking positions, sill joints and provide safety lines.	Barbados	JAN/ 2009	a) Arrangements are being made for repairs to positions 8 and 9 on the aprons. Completion is planned for January 2009. Joints will be sealed during the repairs. b) Safety lines are provided on positions 22 and 11. Safety lines for positions 1 to 10 and position lead/in lines and numbering for all positions to be completed by 30th November 2008.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 495 CAR	Runway end safety area (Annex 14, Vol. I, Section 3.5 – 3.5.1)	Barbados, GRANTLEY ADAMS INTERNATIONAL AIRPORT	A runway end safety area (RESA) is not provided for either runway end.	SEP/ 2008	ICAO Visit May 2008	A	Provide runway end safety areas by extending the platform or reducing the declared distances.	Barbados	MAY/ 2009	A level survey has been requested as part of the aerodrome survey and this information is expected by 24th September 2008. The compaction testing or advice of alternative action is due by 30th September 2008. It is planned that once the compaction is satisfactory the RESAs will be completed by the end of November 2008. If however the compaction is not satisfactory, then the expected completion date would be May 2009.
AGA 496 CAR	Runway Strip, Annex 14, Vol. I (Section 3.4.9, 3.4.12, 3.4.14)	Barbados, GRANTLEY ADAMS INTERNATIONAL AIRPORT	The runway strip is not graded on the south side.	SEP/ 2008	ICAO Visit May 2008	A	Provide a graded runway strip with adequate longitudinal and transverse slopes.	Barbados	NOV/ 2008	There are two areas still to be addressed. The back grading to the edge of the runway shoulder is expected to be completed by 15th October 2008. The cutting of cap rock outcrops is expected to be completed by 15th November 2008.
AGA 497 CAR	Taxiways (Annex 14, Vol. I, Section 3.9 and 3.10)	Barbados, GRANTLEY ADAMS INTERNATIONAL AIRPORT	The taxiways are in very poor condition and without signage.	SEP/ 2008	ICAO Visit May 2008	A	The taxiways need to be repaired; there is a proposed plan to resurface the taxiways and provide signage in the short term.	Barbados	NOV/ 2008	The taxiways are being repaired and taxiway directional and information signs have been installed. They are being wired into the taxiway power circuits as part of the in/progress airfield lighting works. This project is expected to be completed by 30th November 2008 Twenty distance/to/go signs are to be installed and is expected that this will be completed by 30th November 2008.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 498 CAR	Taxiways (Annex 14, Vol. I, Section 3.10)	Barbados, GRANTLEY ADAMS INTERNATIONAL AIRPORT	The taxiway shoulders are not graded and need to be widened.	SEP/ 2008	ICAO Visit May 2008	A	The straight portions of taxiways need to be extended symmetrically on each side of the taxiway, and the surface should be prepared to resist erosion and the ingestion of the surface material by aeroplane engines.	Barbados	MAY/ 2009	Arrangements are being made to increase the width of the taxiway shoulders by two meters on each side. It is estimated that this work will be completed by May 2009.
AGA 499 CAR	Perimeter Road (Annex 14, Vol. I, Section 9.2.26, 9.2.27)	Barbados, GRANTLEY ADAMS INTERNATIONAL AIRPORT	The airfield perimeter road needs to be extended and well prepared, mainly at the east part of the aerodrome.	SEP/ 2008	ICAO Visit May 2008	A	A perimeter road should be provided at the aerodrome. It should be capable of supporting the heaviest vehicles and be usable in all weather conditions.	Barbados	JUN/ 2009	Plans are in place for the improvement and extension of the airport perimeter road. It is expected that the project will be completed by June 2009.
AGA 501 CAR	Disabled Aircraft Removal Plan (Annex 14, Vol. I, Section 9.3.1 & 9.3.2)	Barbados, GRANTLEY ADAMS INTERNATIONAL AIRPORT	There is no disabled aircraft removal plan.	SEP/ 2008	ICAO Visit May 2008	A	A plan for the removal of disabled aircraft on or adjacent to the movement area should be established and a coordinator should be designated to implement the plan.	Barbados	JUN/ 2009	It is the responsibility of the aircraft operator to remove disabled aircraft from the airfield. However, the airport operator will ensure that, within its agreements with the aircraft operators, provision is made for the operator to comply with its responsibility. The airport operator will also enter into arrangements with local constructions for the use of heavy equipment and cranes, as required, to remove small aircraft to ensure that any disruption to airport operations is minimal. Arrangements are also to be established with regional air/freight operators and suitable neighboring States for assistance when needed for large aircraft. A Coordinator to implement the completed plan will be identified, it is expected that the necessary plan will be in place by June 2009.

BRB Barbados

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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MET 10 CAR	Adequate number of MET trained staff.	Barbados	There are requirements of specialized meteorology personnel in the aeronautical meteorology field and of an increase of the number of aeronautical meteorologists.	JUN/ 1996	To use CAR/SAM technical cooperation regional projects for the training of aeronautical meteorology.	B	Installation of a new Doppler radar is due to be completed in 2008, personnel will be trained to analyze imagery. Status: to be completed in 2009.	Barbados	DEC/ 2009	TC and CB cloud systems are identified using satellite imagery. Doppler radar will be useful to identify rain clouds and may be of help to detect wind sheer.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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BLZ Belize										
AGA 166 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - 3.4.2)	Belize, BELIZE CITY, Philip Goldson International	Runway strip length at western runway end is insufficient	NOV/ 2001	ICAO Visit November 2001 ICAO Visit November 2006	A	Do not declare stopway for Runway 25	Belize		
AGA 167 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - Rec 3.3.4 & 6)	Belize, BELIZE CITY, Philip Goldson International	Runway strip width is insufficient in some sections of the northern part and contains objects such as debris and vegetation.	NOV/ 2001	ICAO Visit November 2001 ICAO Visit November 2006	A	Remove the objects Widen the northern strip where required	Belize		
AGA 168 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 3.5 - 3.5.1 & 7.1.9)	Belize, BELIZE CITY, Philip Goldson International	Runway end safety areas are not provided at both runway ends: •East runway end – vegetation, wet ground •West runway end – swamp	NOV/ 2001	ICAO Visit November 2001 ICAO Visit November 2006	A	Consider providing RESAs by not declaring stopways, clearing vegetation and strengthening the ground.	Belize		
AGA 169 CAR	Obstacles (Annex 14, Vol. I , Chap. 4 - 4.2.12)	Belize, BELIZE CITY, Philip Goldson International	Structures, vegetation and tails of larger aircraft parked on the apron are obstacles infringing on the transitional obstacle limitation surfaces	NOV/ 2001	ICAO Visit November 2001 ICAO Visit November 2006	A	Remove obstacles	Belize		
AGA 170 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.2.4.10)	Belize, BELIZE CITY, Philip Goldson International	Displaced runway threshold markings are still visible at both runway ends.	NOV/ 2001	ICAO Visit November 2001 ICAO Visit November 2006	A	Remove runway displaced threshold markings	Belize		
AGA 171 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.2.8.3)	Belize, BELIZE CITY, Philip Goldson International	Taxiway centreline markings to guide aircraft turning around at east runway end are not provided	NOV/ 2001	ICAO Visit November 2001 ICAO Visit November 2006	A	Provide turn-around guidance centreline markings at east runway end	Belize		
AGA 172 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.4.1)	Belize, BELIZE CITY, Philip Goldson International	No approach lighting systems are provided	NOV/ 2001	ICAO Visit November 2001 ICAO Visit November 2006	A	Provide approach lighting systems	Belize		
AGA 173 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.4.1.1)	Belize, BELIZE CITY, Philip Goldson International	No airfield signs are provided	NOV/ 2001	ICAO Visit November 2001 ICAO Visit November 2006	A	Provide illuminated airfield signs	Belize		
AGA 174 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap. 9.2 - Rec. 9.2.30)	Belize, BELIZE CITY, Philip Goldson International	Access from rescue and fire-fighting services facilities to the runway is not the most direct	NOV/ 2001	ICAO Visit November 2001 ICAO Visit November 2006	A	Provide a direct access to the runway via Taxiway B by paving some of the grassed area in front of the RFFS facility	Belize		
AGA 175 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap.10, 10.21 & 10.2.2)	Belize, BELIZE CITY, Philip Goldson International	Taxiway C and apron pavement in poor condition in some areas with cracked slabs, open joints and FOD	NOV/ 2001	ICAO Visit November 2001 ICAO Visit November 2006	A	Remove FOD continuously, seal joints and repair pavements	Belize		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 176 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10,10.2.1 & 10.2.2)	Belize, BELIZE CITY, Philip Goldson International	Taxiway A shoulders in very poor condition in some areas with failed pavement and extensive loose material – FOD	NOV/ 2001	ICAO Visit November 2001 ICAO Visit November 2006	A	Remove FOD continuously and replace Taxiway A shoulder pavement	Belize		
AGA 177 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 9.4.21)	Belize, BELIZE CITY, Philip Goldson International	PAPIs not working and runway lighting intensity reported to be deficient	NOV/ 2001	ICAO Visit November 2001	A	Repair PAPIs and runway lighting system	Belize		
AGA 449 CAR	Certification of Aerodromes (Annex 14, Vol. I Chap.1, 1.4.1, 1.4.3 & 1.4.4)	Belize, Belize City, Philip S.W Goldson Internatinal Airport (MZBZ)	Aerodrome Certification Process has not begun	NOV/ 2006	ICAO Visit November 2006	A	DCA is cheking the regulation. Process must be accelerated.	Belize		
AGA 458 CAR	Certification of Aerodromes (Annex 14, Vol. I Chap.1, 1.5.1, 1.5.2, 1.5.3 & 1.5.4)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	SMS has not been implemented	NOV/ 2006	ICAO Visit November 2006	A	Implement SMS based on the established framework by the AAC. DCA is training personnel. Consider implementating an SMS Unit with the purpose to assess and oversee the Airport Operator.	Belize		
AGA 459 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 3, 3.2.1 & 3.10.1)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	Runway and taxiway shoulders in very poor condition	NOV/ 2006	ICAO Visit November 2006	A	Airport Operator is programing the necessary works. The works must be implemented.	Belize		
AGA 460 CAR	Runway Strip (Annex 14, Vol.I, Chap.3, 3.4.3)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	North side strips have runway 07-25 have uneven terrain	NOV/ 2006	ICAO Visit November 2006	A	Works to level the terrain must be included in the Corrective Action Plan	Belize		
AGA 461 CAR	Obstacles (Annex 14, Vol. I, Chap. 4, 4.2.7)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	Structure infringing the inner transitional surface	NOV/ 2006	ICAO Visit November 2006	A	Structure infriging (elevated water tank). Removal is required.	Belize		
AGA 462 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5, 5.1.1.1)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	Lack of wind direction indicator for runway 07-25.	NOV/ 2006	ICAO Visit November 2006	A	Approach and take off of aircraft have no supporting wind and speed information. Implement 02 WDI that supports approaches to Rwy 07 and 25.	Belize		
AGA 463 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.3.3, 5.3.3.4 and 5.3.3.5)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	Lack of aerodrome beacon	NOV/ 2006	ICAO Visit November 2006	A	An aerodrome beacon is necessary to support aircraft approaches between sunset and sunrise. This facility must be included in the Corrective Action Plan	Belize		
AGA 464 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5, 5.3.9.7 a))	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	Non-standard implementation of a section of the runway edge lights	NOV/ 2006	ICAO Visit November 2006	A	The runway edge lights are all white. Yellow filters must be installed in the last 600 m section	Belize		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 465 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5, 5.3.10.1)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	Lack of implementation of wing bar light	NOV/ 2006	ICAO Visit November 2006	A	Approach to Rwy 25 has no runway threshold lights. Implement wing bar lights for safe approach to Rwy 25	Belize		
AGA 466 CAR	Visual Aids (Annex 14, Vol.I, Chap. 6, 6.3.1)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	Objects not lighted	NOV/ 2006	ICAO Visit November 2006	A	Buildings located on the airport are not lighted. Lighting must be implemented on those buildings located on or near the apron area	Belize		
AGA 467 CAR	Visual Aids (Annex 14, Vol.I, Chap. 7, Rec.7.2.1 & 7.4.1)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	Closed marking should be displayed on temporarily closed parts of the runway and strips, likewise those areas of accumulated construction and waste material must be displayed	NOV/ 2006	ICAO Visit November 2006	A	Marking of construction work areas is poor. The markings must be improved	Belize		
AGA 468 CAR	Electrical Systems (Annex 14, Vol.I, Chap. 8, 8.1.4)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	Non compliance with maximum switch-over time in the electric power supply connections	NOV/ 2006	ICAO Visit November 2006	A	Maximum switch-over time is longer than ICAO Standards. Must comply with the 15 sec. Standard.	Belize		
AGA 469 CAR	Rescue and Fire Fighting (Annex 14, Vol.I, Chap. 9, 9.1.12 & 9.1.13)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	Full scale and partial emergency exercises not conducted	NOV/ 2006	ICAO Visit November 2006	A	Plan and conduct full scale and partial emergency exercise	Belize		
AGA 470 CAR	Visual Aids (Annex 14, Vol. I, Chap. 9, 9.8.3)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	The markings on the apron areas are in very poor condition	NOV/ 2006	ICAO Visit November 2006	A	The markings must be redisigned to meet ICAO standards	Belize		
AGA 471 CAR	Fencing (Annex 14, Vol. I, Chap. 9, 9.10.2)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	The eastern end of Rwy 07/25 is not fenced	NOV/ 2006	ICAO Visit November 2006	A	Expansion works at the eastern end of Rwy 07/25 caused displacement of the fence. A temporary fence must be constructed until the permanent fence is replaced	Belize		
AGA 472 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2.1, 10.2.3 & 10.2.4)	Belize, Belize City, Philip S.W Goldson International Airport (MZBZ)	The maintenance programme of pavements and adjacent areas is not implemented	NOV/ 2006	ICAO Visit November 2006	A	The programme does not include measurements of the friction characteristics of runway surface. The maintenance programme must be implemented	Belize		

BLZ Belize

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AIS 31 CAR	Annex 15, Para. 3.6.4; Annex 4, Para. 2.18; Doc. 8733, Basic ANP, Part VIII, Paras 50 to 58, FASID Table AIS 5	Belize	Lack of implementation of the WGS-84	JAN/ 1998	GREPECAS AIS/MAP Subgroup Survey to States	A	Need to implement the WGS-84 Geodetic System	State	NOV/ 2006	WGS 84 was carried out at P.S.W. Goldson International Airport on 14th. November, 2005. Most of the WGS-84 coordinates have been identified and published in the Belize AIP. There is still some survey to be made due to the extension of the runway. This will be carried out shortly.
AIS 49 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Belize	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State		Obstacle Determination.
AIS 185 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Belize	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 246 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Belize	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported. No action plan reported.	A	Need for effective production of this series of aeronautical charts.	State		
AIS 263 CAR	Annex 4 Chap. 7; Doc 8733 Basic ANP, Part VIII, Paras. 59 d) and 64 4); FASID Table AIS 6	Belize	Partial application of ICAO requirements for the production of En route Navigation Charts-ICAO.	SEP/ 1996	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Effective application of ICAO requirements for the production of En route chart-ICAO.	State		
AIS 273 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 9 to 12	Belize	Lack of highest priority for printing of AIS publications.	APR/ 2001	Records/files in NACC R0; ICAO visit April 2001	A	Need to provide a higher priority for the printing of AIS publications	State		Belize AIP (Second Edition) was published in 2005. Belize has an AIRAC System, AIP Amendment/Supplement and NOTAM System in place presently.
AIS 314 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Belize	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	

BLZ Belize

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
CNS 9 CAR	ATS Speech Circuits Plan (Table CNS 1C) - Belize APP-Puerto Barrios TWR	Belize-Guatemala/COCESNA	The required circuit is not implemented.	NOV/ 1999	COCESNA informed that the Puerto Barrios Airport changed to a National Airport, therefore, this circuit would no longer be an international requirement.	B	Study and implement a possible via. Action Plan: The category of the Puerto Barrios airport was changed to domestic; therefore, this circuit is no longer an international requirement.	Belize, Guatemala and COCESNA		
CNS 57 CAR	ATS speech circuits plan (Table CNS 1C) Belize APP - Merida ACC	Belize and Mexico	The circuit is out of service since 1 June 2003.	JUN/ 2003	Informed during the CA/ANE/WG/3 Meeting and reported by the DCA of Belize.	B	To implement a direct circuit to establish communications in 15 seconds.	Mexico and Belize		
BLZ Belize										
MET 11 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5.	Belize	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49.	JUN/ 1996	Review the functions and training of the aeronautical meteorologist.	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	States		
MET 30 CAR	Notify the RVR for CAT I operations (Annex 3, Part I, Chapter 4, Recommendation 4. 6.3.2)	Belize	RVR have not been implemented.	JUN/ 1996	Plan the acquisition of the RVR	B	To ensure the implementation of required RVR.	State		
MET 47 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	Belize	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies.	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance.	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements.	States		
MET 63 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Belize	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B.	JUN/ 1996	a) Implement the SIP COM/MET Recommendations for the CAR Region, b) Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	States		
MET 88 CAR	Surface wind displays relating to each sensor shall be located in the meteorological station with corresponding displays in the appropriate air traffic services (Annex 3, Part II, Appendix 3, Standard 4.1.2.1)	Belize	Surface wind displays at the meteorological station and the air traffic control tower correspond to different wind sensors located more than 800m apart. This is also the case with other meteorological parameters (temperature, preassure, QNH, etc.).	AUG/ 2008	The acquisition of an automated weather system with sensors located by the runway, preferably the TDZ, with identical displays located at the meteorological station and the ATS units (TWR and APP) is required. Consider a regional project for Central America including training for maintenance.	A				

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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MET 89 CAR	The averaging period for surface wind observation shall be a) 2 minutes for local reports and for wind displays in the ATS units; and b) 10 minutes for METAR and SPECI, except when the 10-minute period includes a marked discontinuity (Annex 3, Part II, Appendix 3, Standard 4.1.3.1).	Belize	Wind systems in use do not provide instantaneous 2-minute and 10-minute mean values of wind direction and speed for operational purposes.	AUG/ 2008	The acquisition of an automated weather system that provides adequate, instantaneous 2-minute and 10-minute mean meteorological data to fulfill the needs of meteorological information at the ATS (TWR and APP) units and the meteorological station is required, to comply with the SARPs of Annex 3.	B				
MET 90 CAR	METAR and SPECI reports shall contain identification of type of report (Annex 3, Part I, Chapter 4, Standard 4.5.1).	Belize	Aviation weather reports METAR and SPECI are not identified by automated OPMET Data Banks, therefore, they are not available for the aviation users.	AUG/ 2008	Ensure that METAR and SPECI reports are coded according to Table A3-1 template METAR/SPECI, considering examples A3-1 and A3-2, Annex 3, Part II, App. 3.	A				

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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VGB British Virgin Islands										
AIS 68 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	British Virgin Islands	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State		Obstacles determination.
AIS 119 CAR	Annex 15 Chap. 8; Doc. 8733 Basic ANP, Part VIII, Para. 25; FASID Tables AIS 1 and 2	British Virgin Islands	Pre- flight information/(implementation of required AIS aerodrome units).	SEP/ 1996	Records/files NACC RO. No action plan reported.	B	Need for effective implementation of required AIS aerodrome units.	State		
AIS 140 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	British Virgin Islands	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 201 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	British Virgin Islands	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 216 CAR	Annex 4 Chap. 3; Doc. 8733 Basic ANP, Part VIII, Paras. 59 a) and 64 1); FASID Table AIS 6	British Virgin Islands	Partial application of ICAO requirements for the production of Aerodrome obstacle chart-ICAO Type A.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports.	A	Need for effective production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 334 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	British Virgin Islands	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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CYM Cayman Islands										
AGA 2 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3.1 & 3.2)	Cayman Islands, GRAND CAYMAN, Owen Roberts Intl	Runway shoulders are not provided as specified in Annex 14, Vol. I, 4th Ed., Section 3.2.1	OCT/ 2000	ICAO Visit October 2000	B	Provide runway shoulders during next runway upgrading. Action Plan: Specified runway shoulder to be provided subject to implemenation of airport development master plan. Reduced data published in AIP.	Cayman Islands	DEC/ 2008	Delayed implementation of airport development master plan.
AGA 6 CAR	Taxiway Parallel to Runway (ANP, Table AOP 1 and Table 3-1 of Annex 14 Vol. I, 4th Edition Chap. 3, 3.9.8, 3.9.12)	Cayman Islands, GRAND CAYMAN, Owen Roberts Intl	No parallel taxiway to the runway as referenced in ANP, Table AOP1	OCT/ 2000	ICAO Visit October 2000	B	Provide a full-length parallel taxiway Action Plan: Provide a parallel taxiway. Subject to airport master plan implementation date. Difference published in AIP.	Cayman Islands	DEC/ 2008	Delayed implementation of airport development master plan.
AGA 12 CAR	Runway Strip (Annex 14, Vol. I, 4th Edition, Chap. 3.4, 3.4.2)	Cayman Islands, GRAND CAYMAN, Owen Roberts Intl	Runway strip length at the eastern runway end does not comply with Annex 14 Vol. I, 4th Ed., Section 3.4.2	OCT/ 2000	ICAO Visit October 2000	A	Extend the runway strip or reduce declared distances. Action Plan: Provide runway strip. Subject to airport master plan implementation date. Difference published in AIP.	Cayman Islands	DEC/ 2007	Delayed implementation of airport development master plan.
AGA 22 CAR	Runway End Safety Area (Annex 14, Vol. I, 4th Edition, Chap. 3.5.1	Cayman Islands, GRAND CAYMAN, Owen Roberts Intl	No runway end safety area is provided at the eastern runway end as specified in Annex 14 Vol I, 4th Ed., Section 3.5.1	OCT/ 2000	ICAO Visit October 2000	A	Provide runway end safety areas by extending the platform or reducing the declared distances. Action Plan: Provide runway end safety area.	Cayman Islands	DEC/ 2007	Delayed implementation of airport development master plan.
AGA 26 CAR	Obstacles (Annex 14, Vol. I, 4th Edition, Chap. 4.2.12)	Cayman Islands, GRAND CAYMAN, Owen Roberts Intl	Obstacles exist in the transitional obstacle limitation surface, including roads, housing, fencing, trees and the tails of aircraft parked on the aprons - Ref. Annex 14 Vol I., 4th Ed., Section 4.2.12	OCT/ 2000	ICAO Visit October 2000	A	Eliminate obstacles by relocating facilities and during the next apron re-configuration. Action Plan: Obstacles lit and facilities removed where practical. Information published in the AIP.	Cayman Islands	DEC/ 2006	Delayed implementation of airport development master plan.
AGA 27 CAR	Obstacles (Annex 14, Vol. I, Chap. 4, 4.2.20 & 4.2.21)	Cayman Islands, CAYMAN BRAC, Gerrard Smith Intl	Obstacles exist in the transitional obstacle limitation surface, including road, buildings and trees - Ref. Annex 14 Vol I Section 4.2.12	OCT/ 2000	ICAO Visit October 2000	A	Eliminate obstacles by relocating facilities. Action Plan: Obstacles lit. Trees removed where practicable. Information published in AIP.	Cayman Islands	JAN/ 2001	Land owner jurisdiction and insufficient enforcement regulations.
AGA 40 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 and ANP, Table AOP 1)	Cayman Islands, GRAND CAYMAN, Owen Roberts Intl	No edge lights are provided on the runway end turn-around area as required in Annex 14 Vol. I, 4th Ed., Section 5.3.17.1	OCT/ 2000	ICAO Visit October 2000	A	Provide taxiway edge lighting on runway turn pads.	Cayman Islands	DEC/ 2007	Delayed implementation of airport development master plan.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 42 CAR	Visual Aids (Annex 14, Vol. I, 4th Ed., Chap. 5.3.4.1(A) and ANP, Table AOP 1)	Cayman Islands, CAYMAN BRAC, Gerrard Smith Intl	No approach lighting is provided - Ref. Annex 14 Vol. I, 4th Ed., Section 5.3.4.1(A)	OCT/ 2000	ICAO Visit October 2000	A	Provide approach lighting system. Action Plan: Installation of simple lighting system not physically practical due to inadequate terrain distance. High intensity runway end indicator lighting system and PAPIs installed.	Cayman Islands	DEC/ 2006	Inadequate terrain distance.
AGA 43 CAR	Visual Aids (Annex 14, Vol. I, 4th Ed., Chap. 5.3.17.1 and ANP, Table AOP 1)	Cayman Islands, CAYMAN BRAC, Gerrard Smith Intl	No apron edge lights are provided - Ref. Annex 14 Vol. I, 4th Ed., Section 5.3.17.1	OCT/ 2000	ICAO Visit October 2000	A	Provide apron edge lighting. Adequate guidance is provided with taxiway edge lights and centerline markings leading up to apron stands which are appropriately marked. Apron edge markings and flood lights are also provided.	Cayman Islands	APR/ 2006	none
AGA 73 CAR	Pavement Surface Conditions (Annex 14, Vol. I, 4th Edition, Chap. 10.2, 10.2.1	Cayman Islands, GRAND CAYMAN, Owen Roberts Intl	GA apron pavement surface deficient - Ref Annex 14 Vol. I, 4th Ed., Section 10.2	OCT/ 2000	ICAO Visit October 2000	A	Upgrade apron pavement. Action Plan: Apron maintenance program implemented and surface swept regularly. Project to overlay surface identified.	Cayman Islands	DEC/ 2007	Delayed implementation of airport development master plan.
CYM Cayman Islands										
AIS 84 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 61 to 64, FASID Table AIS 7	Cayman Islands	Lack of production of the World Aeronautical Chart ICAO 1:1000 000	NOV/ 1994	Records/files NACC RO; GREPECAS reports	B	Need for production of ICAO Aeronautical World Chart 1:1000,000 Action plan: schedule to be completed Dec. 2003	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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1	2	3	4	5	6	7	8	9	10	11
COCE COCESNA										
CNS 16 CAR	ATS Speech Circuits Plan (Table CNS 1C) - La Aurora APP - Puerto Barrios TWR	COCESNA-Guatemala	The required circuit is not implemented. An IDD is being used.	NOV/ 1999	COCESNA informed that the airport changed to national category.	B	Find a mean to implement the circuit or a proposal to amend the FASID. Action Plan: The category of the Puerto Barrios airport was changed to domestic; therefore, this circuit is no longer an international requirement.	COCESNA-Guatemala		
CNS 38 CAR	Radio Navigation Aids (Table CNS 3) ILS Intl. Airport, San Salvador, El Salvador, Runway 07	COCESNA-El Salvador	The equipment is obsolete	APR/ 2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	B	COCESNA informed that public works have initiated to install new equipment in runway 25. Action Plan: The ILS is in place.	COCESNA-El Salvador	JUL/ 2010	
CNS 39 CAR	Radio Navigation Aids (Table CNS 3) DVOR/DME Puerto San José, Guatemala	COCESNA-Guatemala	The equipment is obsolete	APR/ 2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	B	Replacement of a new DVOR/DME Station. This has been included in a COCESNA and State Members project. Action Plan: The replacement of this radio aid has been included in a COCESNA Project.	COCESNA-Guatemala		
CNS 40 CAR	Radio Navigation Aids (Table CNS 3) ILS/DME Intl. Airport La Aurora, Guatemala.	COCESNA-Guatemala	The replacement of the equipment is required	APR/ 2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	B	COCESNA informed that the ILS/DME installation is pending. The on-the-site study performed determined that the implementation is not feasible. Action Plan: Within the radio aids replacement project carried out by COCESNA, the corresponding study was carried out and it was concluded that the implementation of this radio aid is not feasible.	COCESNA-Guatemala		
CNS 46 CAR	Radio Navigation Aids (Table CNS 3) ILS/DME Philip S.W. Goldson Airport, Belize, Belize	COCESNA-Belize	The replacement of the equipment is required	APR/ 2003	89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	B	A new equipment ILS/DME is required. Action Plan: The replacement of this radio aid has been included in a COCESNA Project.	COCESNA-Belize	JAN/ 2009	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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CNS 48 CAR	Surveillance Systems (Table CNS 4A)	COCESNA	No existence of a surveillance in the remotes zones of the Pacific FIR CENAMER remotes zones.		89 Meeting of Civil Aviation General Directors of Central America and Panama (DGAC CAP/89)	B	Bearing in mind the improvements made by COCESNA in the ACC CENAMER, COCESNA is evaluating the feasibility of implementing ADS based on satellite communications.	COCESNA	DEC/ 2006	No changes have been made.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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CRI Costa Rica										
AGA 224 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - 3.4.3 & 6)	Costa Rica, ALAJUELA/ SAN JOSE, Intl Juan Santamaria	The runway strip width is insufficient and it has objects such as construction equipment, aircraft containers, aircraft parked on the apron, fencing and taxiways, especially on the east end of the runway	MAR/ 2002	ICAO Visit March 2002 & September 2006	A	Increase the width of the runway strip; reduce the objects on the runway strip by removing and relocating as many objects as possible	Costa Rica		
AGA 226 CAR	Obstacles (Annex 14, Vol. I , Chap. 4 - 4.2.12 & 4.2.21)	Costa Rica, ALAJUELA/ SAN JOSE, Intl Juan Santamaria	There are obstacles infringing the transition surfaces, this includes topography, buildings, fencing and aircraft parked on the apron	MAR/ 2002	ICAO Visit March 2002 & September 2006	A	Remove, lighten and/or mark obstacles	Costa Rica		
AGA 228 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5- 5.2.8.7)	Costa Rica, ALAJUELA/ SAN JOSE, Intl Juan Santamaria	Markings on the centreline of the taxiway, including the apron, are not continuous	MAR/ 2002	ICAO Visit March 2002	A	Correct markings on the centreline of the taxiway	Costa Rica		
AGA 229 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.14.1 through 5.2.14.4)	Costa Rica, ALAJUELA/ SAN JOSE, Intl Juan Santamaria	Apron has no safety lines. Lack of Painting Maintenance	MAR/ 2002	ICAO Visit March 2002 & September 2006	A	Provide safety lines on the platform	Costa Rica		
AGA 230 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5- 5.3.5.1 & 5.3.5.23)	Costa Rica, ALAJUELA/ SAN JOSE, Intl Juan Santamaria	Runway 25 has no approach lighting system	MAR/ 2002	ICAO Visit March 2002 & September 2006	A	Provide a simple approach lighting system. Change the PAPI system from the east to the west side of Runway 25	Costa Rica		
AGA 231 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5- 5.3.5.1 and ANP FASID Table AOP1)	Costa Rica, ALAJUELA/ SAN JOSE, Intl Juan Santamaria	Runway 25 has no visual approach slope indicator systems	MAR/ 2002	ICAO Visit March 2002 & September 2006	A	Provide visual approach slope indicator systems	Costa Rica		
AGA 232 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5- 5.4.1.1, 5.4.2, 5.43, 5.4.4, 5.4.5, 5.4.6 & 5.4.7)	Costa Rica, ALAJUELA/SAN JOSE, Intl Juan Santamaria	Signs on the airfield do not comply with standards in terms of design and illumination	MAR/ 2002	ICAO Visit March 2002 & September 2006	A	Provide adequate signs on the airfield	Costa Rica		
AGA 424 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 2.2.6.2)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	Does not apply ANC - PCN Method	SEP/ 2006	ICAO Visit September 2006	A	To provide information	Costa Rica		
AGA 425 CAR	Runway Strip (Annex 14, Vol.I, Chap.3 & 3.4.8)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	Runway strip on the East side is affected by superficial sewage	SEP/ 2006	ICAO Visit September 2006	A	It should be tubed and marked	Costa Rica		
AGA 426 CAR	Runway Strip (Annex 14, Vol.I, Chap.3 -3.4.2, 3.4.8 & 3.4.14)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	There is a road located in the sector before threshold 25 that is very close to the Runway	SEP/ 2006	ICAO Visit September 2006	A	The lenght, width and slope of the Runway strip should be verified	Costa Rica		
AGA 427 CAR	Runway End Safety Area (Annex 14, Vol.I, Chap. 3.5, 3.5.1 to 3.5.11)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	Runway 05/27 does not have RESA	SEP/ 2006	ICAO Visit September 2006	A	Enable RESAs	Costa Rica		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 428 CAR	Obstacles (Annex 14, Vol. I, Chap. 3.6 - 3.6.6)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	Mark the closed perimeter located before threshold 25	SEP/ 2006	ICAO Visit September 2006	A	To mark the close perimeter fencing considering runway width projection	Costa Rica		
AGA 429 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3.9 & 3.9.16)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	The current Geometry design of the rapid exit taxiway does not allow to optimize air traffic management for arrivals on Runway 07	SEP/ 2006	ICAO Visit September 2006	B	To study the location of a rapid exit taxiway	Costa Rica		
AGA 430 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5.2.1.1, 5.2.1.2, 5.2.1.4 through 5.2.1.7)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	There is a lack of maintenance to the different types of markings on the runway, taxiways and apron.	SEP/ 2006	ICAO Visit September 2006	A	Put the different types of markings on the Runway, taxiways and apron	Costa Rica		
AGA 431 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.3.4, 5.3.4.1 c), 5.3.4.10 through 5.3.4.21)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	The approach lighting systems do not meet the requirements and the current system is poorly maintained	SEP/ 2006	ICAO Visit September 2006	A	Place the different types of Runway, taxiways and apron markings as required	Costa Rica		
AGA 432 CAR	Obstacles (Annex 14, Vol. I, Chap. 4 - 4.2.13)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	The approach surface to Runway 25 has obstacles such as trees, antennas and light posts	SEP/ 2006	ICAO Visit September 2006	A	Eliminate and mark the obstacles	Costa Rica		
AGA 433 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.2.10.2 through 5.2.10.5)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	The Runway holding position marking location is marked near the taxiway centreline and the taxiway side edge markings at Runway 07, which causes confusion.	SEP/ 2006	ICAO Visit September 2006	A	Study and redesign the markings with the necessary precautions in order to protect sensible areas and critical ILS	Costa Rica		
AGA 434 CAR	Obstacles (Annex 14, Vol. I, Chap. 6 - 6.1-6.1.1, 6.1.11, 6.3, 6.3.11 through 6.3.36)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	The constructions and electrical intallations inside and outside the airport are not iluminated	SEP/ 2006	ICAO Visit September 2006	A	Iluminate obstacles both in and outside the airport	Costa Rica		
AGA 435 CAR	Electrical Systems (Annex 14, Vol. I Chap. 8, 8.1, 8.1.1 through 8.1.11, 8.2, 8.2.1 through 8.2.3 , 8.3, 8.3.1 through 8.3.5)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	The secondary power supply requirements need to be verified	SEP/ 2006	ICAO Visit September 2006	A	Review and modify as required	Costa Rica		
AGA 436 CAR	Taxiways (Annex 14, Vol. I Chap. 3, 3.9.8, 3.11, 3.11.2 through 3.11.5)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	The minimum separation distances between the centre line of the taxiway and the centre line of the Runway are not complied with. A small portion of the Eastern strip of taxiway D to Runway 07 has an important slope on the terrain	SEP/ 2006	ICAO Visit September 2006	A	Cimply with the minimum separatin distances and level the terrain	Costa Rica		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 437 CAR	Visual Aids (Annex 14, Vol. I Chap.5, 5.3.10, 5.3.10.1 through 5.3.10.10)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	The runway threshold and wing bar lights do not comply with the location and separation requirements	SEP/ 2006	ICAO Visit September 2006	A	Review, rearrange and reinstall the runway threshold and wing bar lights as necessary	Costa Rica		
AGA 438 CAR	Certification of Aerodromes (Annex 14, Vol. I Chap.1, 1.4.1)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	Certification of Aerodromes and aerodrome inspector concepts are not included in the Basic Law	SEP/ 2006	ICAO Visit September 2006	A	Modify Legal Framework to include concepts	Costa Rica		
AGA 439 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap.9, 9.2, 9.2.21 through 9.2.30)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	The RFFS facilities are very near to the fuel facilities; and the access roads are intercepted by a service road	SEP/ 2006	ICAO Visit September 2006	A	Move tha fuel facilities at least 150 meters from the RFFS facilities or move the RFFS facilities far from the fuel facilities but near the Runway	Costa Rica		
AGA 440 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap.9, 9.2, 9.2.21 through 9.2.30)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	The RFFS personnel does not have the aviation fire fighter certification	SEP/ 2006	ICAO Visit September 2006	A	To train the personnel andcertify them as aviation fire fighters	Costa Rica		
AGA 441 CAR	Bird Hazard (Annex 14, Vol. I, Chap.9, 9.4 & 9.5)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	There is no a Wildlife Prevention and mitigation Programme	SEP/ 2006	ICAO Visit September 2006	A	Prepare and establish the Programme	Costa Rica		
AGA 442 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10.-10.1.1 10.2 & 10.2.1)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	Lack of Implementation of a Maintenance Program for the pavement surfaces and sewage. The runway surface is not measured periodically to determine the friction characteristics of the runway surface	SEP/ 2006	ICAO Visit September 2006	A	It is necessary to periodically measure the friction characteristics of the runway surface	Costa Rica		
AGA 443 CAR	Visual Aids (Annex 14, Vol. I Chap.5, 5.1.1.1, through 5.1.1.5)	Costa Rica, ALAJUELA, San José, Intl. Juan Santamaría	The wind direction indicators are not properly maintained and iluminated and the bases are not frangible	SEP/ 2006	ICAO Visit September 2006	A	Include a Maintenance Programme, iluminate indicators and replace bases with frangible structures	Costa Rica		
AGA 444 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10.-10.1.1 10.2 & 10.2.1)	Costa Rica, LIBERIA Daniel Oduber Quirós	Lack of Implementation of a Maintenance Program for the pavement surfaces and sewage. The runway surface is not measured periodically to determine the friction characteristics of the runway surface	SEP/ 2006	ICAO Visit September 2006	A	It is necessary to periodically measure the friction characteristics of the runway surface	Costa Rica		
AGA 445 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 2.2.6.2)	Costa Rica, LIBERIA Daniel Oduber Quirós	Does not apply ANC - PCN Method	SEP/ 2006	ICAO Visit September 2006	A	To provide information	Costa Rica		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 446 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap.9, 9.2, 9.2.21 through 9.2.30)	Costa Rica, LIBERIA Daniel Oduber Quirós	The RFFS facilities are very near to the fuel facilities; and the access roads are intercepted by a service road	SEP/ 2006	ICAO Visit September 2006	A	Study the moving of the fuel facilities at least 150 meters from the RFFS facilities or move the RFFS facilities far from the fuel facilities but near the Runway. Install the precaution marking at the vehicle exit	Costa Rica		
AGA 447 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap.9, 9.2, 9.2.21 through 9.2.30)	Costa Rica, LIBERIA Daniel Oduber Quirós	The RFFS personnel does not have the aviation fire fighter certification	SEP/ 2006	ICAO Visit September 2006	A	To train the personnel andcertify them as aviation fire fighters	Costa Rica		
AGA 448 CAR	Runway End Safety Area (Annex 14, Vol.I, Chap. 3.5, 3.5.1 to 3.5.11)	Costa Rica, LIBERIA Daniel Oduber Quirós	Runway 05/27 does not have RESA	SEP/ 2006	ICAO Visit September 2006	A	Enable RESAs	Costa Rica		
AGA 450 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5- 5.3.5.1 and ANP FASID Table AOP1)	Costa Rica, LIBERIA Daniel Oduber Quirós	Runway 25 has no visual approach slope indicator systems	SEP/ 2006	ICAO Visit September 2006	A	Provide visual approach slope indicator systems	Costa Rica		
AGA 451 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5- 5.4.1.1, 5.4.2, 5.4.3 & 5.4.4)	Costa Rica, LIBERIA Daniel Oduber Quirós	Signs on the airfield do not comply with standards in terms of design and illumination	SEP/ 2006	ICAO Visit September 2006	A	Provide adequate signs on the airfield	Costa Rica		
AGA 452 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.14.1 through 5.2.14.4)	Costa Rica, LIBERIA Daniel Oduber Quirós	Apron has no safety lines. Lack of Painting Maintenance	SEP/ 2006	ICAO Visit September 2006	A	Provide safety lines on the platform	Costa Rica		
CRI Costa Rica										
AIS 33 CAR	Annex 15, Para. 3.6.4; Annex 4, Para. 2.18; Doc. 8733, Basic ANP, Part VIII, Paras 50 to 58, FASID Table AIS 5	Costa Rica	Partial implementation of the WGS-84	JAN/ 1998	GREPECAS AIS/MAP Subgroup Survey to States	A	Need to implement the WGS-84 Geodetic System	State	JUL/ 2007	Obstacles determination.
AIS 50 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Costa Rica	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State	JUL/ 2007	Obstacles determination.
AIS 171 CAR	Annex 4Chap. 17.	Costa Rica	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. A new chart is being developed.	B	Need for production of aeronautical charts according to the ICAO specifications.	State	OCT/ 2007	
AIS 186 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Costa Rica	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for production of aeronautical charts of this series according to the ICAO specifications.	State	JUL/ 2007	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AIS 248 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Costa Rica	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for effective production of this series of aeronautical charts.	State	JAN/ 2000	
AIS 315 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Costa Rica	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	A	AUG/ 2007	
CRI Costa Rica										
MET 12 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	Costa Rica	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49	JUN/ 1996	Review the functions and training of the aeronautical meteorologist.	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	States		
MET 31 CAR	Notify the RVR for CAT I operations (Annex 3, Part I, Chapter 4, Recommendation 4. 6.3.2)	Costa Rica	RVR have not been implemented	JUN/ 1996	Plan the acquisition of the RVR	B	To ensure the implementation of required RVR.	State		
MET 48 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	Costa Rica	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements.	States		
MET 64 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Costa Rica	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B.	JUN/ 1996	a) Implement the SIP COM/MET Recommendations for the CAR Region, b) Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	States		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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CUB Cuba										
AGA 132 CAR	Runway Strips (Annex 14, Vol. I, 4th Edition Chap. 3.4.3 & 6)	Cuba, HABANA, José Marti International	The runway strip width is insufficient in the southeast area of the runway close to Terminal 1 and the Runway 24 threshold	SEP/ 2008	ICAO Visit June 2001	A	To remove objects and to increase the runway strip width. Action Plan: Aeronautical study for recovering the necessary area in order to comply with the 150 m width of runway strip in the southeast zone.	ECASA	MAR/ 2010	Economic constrains in entities of the country. An aeronautical study was made and works are under progress to rescue the land to complete the runway strip.
AGA 140 CAR	Visual Aids (Annex 14, Vol. I, 4th Edition, Chap. 5.3.4.1.(C) and ANP Table AOP1)	Cuba, HOLGUIN, Frank Pais	There is no Category I precision approach lighting system on Runway 05.	SEP/ 2008	ICAO Visit in June 2001	A	Provide precision approach lighting system. Action Plan: The project study and hiring implementation process are on-going.	ECASA	JUN/ 2009	
AGA 143 CAR	Visual Aids (Annex 14, Vol. I, 4th Edition, Chap. 5.3.4.1.(A) and ANP Table AOP1)	Cuba, CAMAGUEY, Ignacio Agramonte	Runway 25 is lacking a simple approach lighting system	SEP/ 2008	ICAO Visit in June 2001	A	To provide a simple approach lighting system. Action Plan: Proceeding to request an amendment to the CAR/SAM ANP Table AOP1 since Camaguey no longer has ILS and it does not justify the installation of this type of system for a runway that is normally used in good visibility conditions and has another visual aid such as PAPI.	ECASA	JUN/ 2010	
CUB Cuba										
MET 32 CAR	CAR/SAM ANP MET Requirements, Table AOP 1.	Cuba	MUCM RVR has not been implemented.	JUN/ 1996		B	Request ICAO a proposal for amendment of the CAR/SAM ANP FASID Table AOP1 Completion date: Boyeros - December 2006 Varadero - December 2007 Camagüey - the requirement will be deleted when requesting the elimination of the main runway Cat I	ECASA	DEC/ 2007	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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DMA Dominica										
AIS 52 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Dominica	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State		Obstacle determination.
AIS 126 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Dominica	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 145 CAR	Annex 4 Chap. 16 Append. 5. FASID Table AIS 7.	Dominica	Production of the world aeronautical charts-ICAO not according to the sheet layout index established for this series of chart.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the established requirements.	State		
AIS 172 CAR	Annex 4Chap. 17.	Dominica	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the ICAO specifications.	State		
AIS 187 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Dominica	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 332 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Dominica	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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DOM Dominican Republic										
AGA 45 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.2.2 , 5.2.7 and ANP, Table AOP 1)	Dominican Republic, SANTO DOMINGO, Las Americas Intl	Runway markings faded	MAY/ 2000	ICAO Visit May 2000	A	Repaint runway markings	Dominican Republic	DEC/ 2005	
AGA 46 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.4, 5.3.4.1 and ANP, Table AOP 1)	Dominican Republic, SANTO DOMINGO, Las Americas Intl	No approach lighting system on Rwy 35	MAY/ 2000	ICAO Visit May 2000	A	Install approach lighting system. Action Plan: Delay in the assigment of economical resources.	Dominican Republic	DEC/ 2005	
AGA 47 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.4, 5.4.11 and ANP, Table AOP 1)	Dominican Republic, SANTO DOMINGO, Las Americas Intl	No Signs	MAY/ 2000	ICAO Visit May 2000	A	Install signs. Action Plan: Delay in the assigment of economical resources.	Dominican Republic	DEC/ 2005	
AGA 61 CAR	Fencing (Annex 14, Vol. I, Chap. 9, 9.10 & 9.10.2)	Dominican Republic, SANTO DOMINGO, Las Americas Intl	Perimeter security deficient	MAY/ 2000	ICAO Visit May 2000	A	Provide secure perimeter barrier. Action Plan: The perimeter barrier is being installed.	Dominican Republic	DEC/ 2004	
AGA 77 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2, 10.2.1,10.2.2, 10.2.3 & 10.2.4)	Dominican Republic, SANTO DOMINGO, Las Americas Intl	Runway surface pavement irregularities and rubber deposit accumulation.	MAY/ 2000	ICAO Visit May 2000 IATA Report June 2000	A	Remove rubber and upgrade pavements. Action Plan: Regarding the rubber removal, we are in the process of purchasing a removal machine. Regarding the pavement upgrade, we are conditioning the parallel taxiway in order to use it as a probable runway, by doing this, we will give maintenance to the runway.	Dominican Republic	DEC/ 2005	
AGA 78 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2, 10.2.1, 10.2.4)	Dominican Republic, SANTO DOMINGO, Las Americas Intl	Taxiway and apron surface pavement irregularities.	MAY/ 2000	ICAO Visit May 2000	A	Upgrade pavements. Action Plan: The taxiway and apron pavements are being repaired. To this date, the ECO3 and ECO4 sectors of the taxiway and apron have been repaired.	Dominican Republic	DEC/ 2005	
AGA 480 CAR	Certification of Aerodromes (Annex 14, Vol. I Chap.1, 1.4.1, 1.4.3, 1.4.5).	Dominican Republic - Dr. Joaquín Balaguer International Airport	Regulations on Certification of Aerodromes were published but have not been in force for their compppliance.	JAN/ 2007	ICAO Visit January 2007	A	To put in force the regulations on certification of aerodromes for its compliance by the airport operators	Dominican Republic		
AGA 481 CAR	Maintenance (Annex 14, Vol. I Chap.2, 2.3.1, 2.3.2, 2.3.3, Appendix 5, Table A 5-2)	Dominican Republic - Dr. Joaquín Balaguer International Airport	The aerodrome geodetic ondulation data is not contained in the Aerodromes Manuals.	JAN/ 2007	ICAO Visit January 2007	A	The airport operators should include the geodetic ondulation on runways and threshold data in the Aerodromes Manual.	Dominican Republic		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 482 CAR	Visual Aids (Annex 14, Vol.I, Chap.3, Rec. 3.2.1)	Dominican Republic - Dr. Joaquín Balaguer International Airport	The runway and taxiways do not have shoulders	JAN/ 2007	ICAO Visit January 2007	A	To put shoulders to the runway and taxiways	Dominican Republic		
AGA 483 CAR	Runways (Annex 14, Vol. I, Chap. 3, 3.4.6 and Chap. 9, 9.4.3)	Dominican Republic - Dr. Joaquín Balaguer International Airport	Width is insufficient cleared of tall grass that exist beyond the graded portion of the runway strip.	JAN/ 2007	ICAO Visit January 2007	A	Clear tall grass	Dominican Republic		
AGA 484 CAR	Runway End Safety Area (Annex 14, Vol.I, Chap.3 - 3.5.1, 3.5.2 & 3.5.3)	Dominican Republic - Dr. Joaquín Balaguer International Airport	RESAs are not declared	JAN/ 2007	ICAO Visit January 2007	A	To declare RESAs	Dominican Republic		
AGA 485 CAR	Obstacles (Annex 14, Vol. I, Chap. 4, 4.2.11)	Dominican Republic - Dr. Joaquín Balaguer International Airport (MDJB)	There are shrubs and trees in the approach and departure areas of runway 01-19, piercing the gradients lightly.	JAN/ 2007	ICAO Visit January 2007	A	Clear shrubs and trees below the corresponding gradients.	Dominican Republic		
AGA 486 CAR	Visual Aids (Annex 14, Vol.I, Chap.5, Rec. 5.2.13.1, 5.2.14.2, 5.2.15.1, 5.2.15.2 and 5.2.15.3)	Dominican Republic - Dr. Joaquín Balaguer International Airport (MDJB)	Lack of markings on the apron	JAN/ 2007	ICAO Visit January 2007	A	The markings should be painted to meet ICAO standards	Dominican Republic		
AGA 487 CAR	Visual Aids (Annex 14, Vol.I, Chap.5, Rec. 5.3.9.7, letter b)	Dominican Republic - Dr. Joaquín Balaguer International Airport (MDJB)	Only two thirds of the yellow lights at the edge of the runway are installed.	JAN/ 2007	ICAO Visit January 2007	A	To complete the lights on the edge of the runway with yellow filters.	Dominican Republic		
AGA 488 CAR	Visual Aids (Annex 14, Vol.I, Chap.5, Rec. 5.4.3.7, 5.4.3.8, 5.4.3.9, and 5.4.3.10)	Dominican Republic - Dr. Joaquín Balaguer International Airport (MDJB)	Lack of information signs.	JAN/ 2007	ICAO Visit January 2007	A	To install information signs.	Dominican Republic		
AGA 489 CAR	Visual Aids (Annex 14, Vol.I, Chap.5, 5.4.1.1 and 5.4.4.2)	Dominican Republic - Dr. Joaquín Balaguer International Airport (MDJB)	Lack of VOR verification point sign.	JAN/ 2007	ICAO Visit January 2007	A	Install VOR verification point sign.	Dominican Republic		
AGA 490 CAR	Visual Aids (Annex 14, Vol. I, Chap.6, 6.3.1)	Dominican Republic - Dr. Joaquín Balaguer International Airport (MDJB)	The constructions inside the airport are not iluminated.	JAN/ 2007	ICAO Visit January 2007	A	Iluminate constructions inside the airport.	Dominican Republic		
AGA 491 CAR	Bird Hazard (Annex 14, Vol. I, Chap. 9, 9.4.4)	Dominican Republic - Dr. Joaquín Balaguer International Airport (MDJB)	There is a landfill in the vicinity of the airport.	JAN/ 2007	ICAO Visit January 2007	A	To oversee the landfill management in order to diminish the presence of birds in the vicinity.	Dominican Republic		
AGA 492 CAR	Visual Aids (Annex 14, Vol.I, Chap.5, Rec. 5.3.9.7, letter b)	Dominican Republic - José Francisco Peña Gómez, Las Américas (MDSD)	The last 600 mts at the edge of the runway are not yellow.	JAN/ 2007	ICAO Visit January 2007	A	To complete the lights on the edge of the runway with yellow filters.	Dominican Republic		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 493 CAR	Visual Aids (Annex 14, Vol.I, Chap.6, 6.3.1)	Dominican Republic - José Francisco Peña Gómez, Las Américas (MDSD)	The constructions inside the airport are not iluminated.	JAN/ 2007	ICAO Visit January 2007	A	Iluminate constructions inside the airport.	Dominican Republic		
AGA 494 CAR	Pistas (Anexo 14, Vol. I, Cap. 3, 3.4.6 and Chap. 9, 9.4.3)	Dominican Republic - José Francisco Peña Gómez, Las Américas (MDSD)	The grass is quite tall on the apron strips.	JAN/ 2007	ICAO Visit January 2007	A	Tu cut the grass and maintain it in a an appropiate height .	Dominican Republic		
DOM Dominican Republic										
AIS 34 CAR	Annex 15, Para. 3.6.4; Annex 4, Para. 2.18; Doc. 8733, Basic ANP, Part VIII, Paras 50 to 58, FASID Table AIS 5	Dominican Republic	Partial implementation of the WGS-84	JAN/ 1998	GREPECAS AIS/MAP Subgroup Survey to States, Was informed on a new WGS 84 suvey project (enc. 131 file NE-58-3/mar-15-2002)	A	Need to implement the WGS-84 Geodetic System. Action Plan: 90% completed.	State	NOV/ 2004	Administrative coordination. Obstacles determination.
AIS 53 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Dominican Republic	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO.	A	Need for production of aeronautical charts according to requirements. Action Plan: on-going. Aeronautical and topographic charts are nowadays being modified and updated.	State	NOV/ 2004	Administrative coordination. Obstacles determination.
AIS 127 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Dominican Republic	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. Not included in the action plan.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 188 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Dominican Republic	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports.	A	Need for production of aeronautical charts of this series according to the ICAO specifications. Action Plan: on-going. Aeronautical and topographic charts are nowadays being modified and updated.	State	NOV/ 2004	Administrative coordination with external organization.
AIS 249 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Dominican Republic	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports.	A	Need for effective production of this series of aeronautical charts. Action Plan: on-going. Aeronautical and topographic charts are nowadays being modified and updated.	State	NOV/ 2004	Administrative coordination.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 272 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 61 to 64, FASID Table AIS 7	Dominican Republic	Lack of production of the World Aeronautical Chart ICAO 1:1000 000	NOV/ 1994	Records/files NACC RO; GREPECAS reports	B	Need of production of the World Aeronautical Chart ICAO 1:1000 000. Action Plan: on-going. Aeronautical and topographic charts are nowadays being modified and updated.	State	NOV/ 2004	Administrative coordination with external organization.
AIS 316 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Dominican Republic	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	
DOM Dominican Republic										
MET 14 CAR	Adequate number of MET trained staff.	Dominican Republic	There are requirements of specialized meteorology personnel in the aeronautical meteorology field and of an increase of the number of aeronautical meteorologists.	JUN/ 1996	To use CAR/SAM technical cooperation regional projects for the training of aeronautical meteorology.	A	To establish training courses at national level for basic and regular levels, and to use the regional projects of Technical Cooperation for high level. Action Plan: There are requirements of specialized meteorological personnel in the Meteorological Aeronautical field and an important amount of aeronautical meteorologists.	States	DEC/ 2008	Few regional contacts for a training plan and lack of financing.
MET 33 CAR	CAR/SAM ANP MET Requirements, Table AOP 1.	Dominican Republic	RVR have not been implemented.	JUN/ 1996		B	Establishment of RVR systems. Action Plan: The RVR hav not been implemented yet.	State	DEC/ 2008	Lack of financing and very expensive equipment.
MET 49 CAR	CAR/SAM ANP, Part VI, Meteorology, para. 3.	Dominican Republic	Do not transmit regularly the special AIREPs in accordance with requirements.	MAY/ 1996	Keep a strict supervision and control of the operational ATS/MET staff to keep them informed on the importance of AIREPs and on the need to disseminate them where required.	A	To coordinate with the ATC the technical agreements to obtain the information from the aricrafts. Action Plan: The special AIREPs are not being transmitted in regular form, according to the requirements.	States		Problems to establish the letters of agreement and few personnel.
MET 66 CAR	CAR/SAM ANP Requirements, Part VI, para. 8.	Dominican Republic	There are deficiencies in the OPMET exchange.	JUN/ 1996	Review the OPMET exchange procedures, both in the meteorology and communications areas.	A	To foster the control of MET information exchange of the Region and at national level.	States	DEC/ 2006	Lack of information and few available personnel to carry out the control. There are deficiencies in the OPMET exchange

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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1	2	3	4	5	6	7	8	9	10	11
MET 86 CAR	Assess visual range in runway for CAT I operations (Annex 3, Chapter 4, Rec 4.6.3.2 a)	Dominican Republic aeronautical meteorological stations	MDPC and MDSD RVRs are not implemented or in operation.		Plan the acquisition of or repair RVRs .	A		CAA		
MET 87 CAR	Displays [Annex 3, Appendix 3, Standard 4.1.2.1]	Dominican Republic aeronautical meteorological stations	Surface wind displays in ATS units do not correspond to the same sensors of the MET station representative of the touchdown zone in MDSD aerodrome.		Install remote displays of the MET station representative of the touchdown zone in the ATS units.	A		CAA		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
SLV El Salvador										
AGA 49 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 and ANP, Table AOP 1)	El Salvador, SAN SALVADOR, El Salvador Intl	Signs not illuminated - Ref. Annex 14, Vol. I, Section 5.4.1.7, 5.4.1.8, 5.4.2- 5.4.3	DEC/ 2000	ICAO Visit November 2000 & September 2006 IATA Report January 2001	A	Replace with illuminated signs	El Salvador	DEC/ 2008	
AGA 67 CAR	Rescue and Fire Fighting Service and Airport Emergency Planning (Annex 14, Vol. I, Chap. 9.1 & 9.2)	El Salvador, SAN SALVADOR, El Salvador Intl	No direct access is provided between the RFFS facility and the runway as specified in Annex 14, Vol. I Section 9.2.22 and 26)	DEC/ 2000	ICAO Visit November 2000 & September 2006 IATA Report January 2001	A	Provide direct access link	El Salvador		
AGA 453 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.14.1 through 5.2.14.4)	El Salvador, SAN SALVADOR, El Salvador Intl	The signs do not comply with the standard	SEP/ 2006	ICAO Visit September 2006	A	Replace the signs in compliance to the standard	El Salvador	DEC/ 2008	
AGA 454 CAR	Certification of Aerodromes (Annex 14, Vol. I Chap.1, 1.4.6)	El Salvador, SAN SALVADOR, El Salvador Intl	SMS has not been implemented	SEP/ 2006	ICAO Visit September 2006	A	Implement SMS based on the established framework by the AAC	El Salvador		
AGA 456 CAR	Runway End Safety Area (Annex 14, Vol.I, Chap.3- 3.5.1 through 5.3)	El Salvador, SAN SALVADOR, El Salvador Intl	The Runway does not have a RESA	SEP/ 2006	ICAO Visit September 2006	A	To enable RESA	El Salvador		
AGA 473 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2.1, Chap. 3 Rec. 3.4.8, 3.4.10)	San Salvador, El Salvador International Airport	The canal that cross through the 07 and 25 thresholds, might cause unsafe operation of aircrafts that could have a large or a short landing	NOV/ 2006	ICAO Visit November 2006	A	To cover tha canal 150mts, taking into account 75 mts on each side of the centre line on runway 07-25	El Salvador	DEC/ 2009	
AGA 475 CAR	Visual Aids (Annex 14, Vol.I, Chap.6, 6.1, 6.3.14)	San Salvador, El Salvador International Airport	The adjacent buildings to aprons are not indicated	NOV/ 2006	ICAO Visit November 2006	A	To sign buildings and hangars	El Salvador	DEC/ 2008	
AGA 476 CAR	Visual Aids (Annex 14, Vol.I, Chap.3, 3.10.2)	San Salvador, El Salvador International Airport	The curved segments of the taxiway shoulders that are not indicated	NOV/ 2006	ICAO Visit November 2006.	A	To indicate the curved segments of the taxiway shoulders.	El Salvador		
AGA 477 CAR	Visual Aids (Annex 14, Vol.I, Chap.6, 6.1, 6.3.14)	San Salvador, El Salvador International Airport	The personnel that develop the activities related to aircrafts do not wear reflective gear and the vehicles that operate in this area do not turn on their beacon	NOV/ 2006	ICAO Visit November 2006	A	Personnel and vehicles that work on the apron should wear reflective gear and should turn on their correspondent beacon	El Salvador		
AGA 479 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2.1, 10.2.2, 10.2.3, 10.2.4, 10.2.8 & 10.2.13)	San Salvador, El Salvador International Airport	Low index of cracking on runway 07-25 and high accumulation of rubber on the pavement surface of the runway	NOV/ 2006	ICAO Visit November 2006	A	To implement a programme to prevent rubber cracking. Periodical friction measurement	El Salvador		
SLV El Salvador										

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AIS 10 CAR	Annex 15, Chap. 4, Para. 4.2.9; Doc. 8733, Basic ANP, Part VIII, Paras 36 to 37	El Salvador	Lack of regular and effective updating of the AIP Document	OCT/ 2000	GREPECAS AIS/MAP Subgroup	A	Need to keep updated the information/data contained in the AIP	State		
AIS 35 CAR	Annex 15, Para. 3.6.4; Annex 4, Para. 2.18; Doc. 8733, Basic ANP, Part VIII, Paras 50 to 58, FASID Table AIS 5	El Salvador	Partial implementation of the WGS-84	JAN/ 1998	GREPECAS AIS/MAP Subgroup Survey to States	A	Need to implement the WGS-84 Geodetic System	State	NOV/ 2006	Obstacles determination.
AIS 54 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	El Salvador	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO.	A	Need for production of aeronautical charts according to requirements.	State		Obstacles determination.
AIS 85 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 61 to 64, FASID Table AIS 7	El Salvador	Lack of production of the World Aeronautical Chart ICAO 1:1000 000	NOV/ 1994	Records/files NACC RO; GREPECAS reports	B	Need for production of ICAO Aeronautical World Chart 1:1000,000	State		
AIS 92 CAR	Doc. 8733 Basic ANP, Part VIII, Para.24	El Salvador	Lack of use of English for plain language texts	SEP/ 1996	Records/files NACC RO; GREPECAS reports	A	Need of use of English for plain language texts.	State		
AIS 98 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 9 to 12	El Salvador	Lack of highest priority for printing of AIS publications.	SEP/ 1996	Records/files NACC RO; GREPECAS reports	A	Need to provide a higher priority for the printing of AIS publications	State		
AIS 146 CAR	Annex 4 Chap. 16 Append. 5. FASID Table AIS 7.	El Salvador	Production of the world aeronautical charts-ICAO not according to the sheet layout index established for this series of chart.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports.	B	Need for production of aeronautical charts according to the established requirements.	State		
AIS 173 CAR	Annex 4Chap. 17.	El Salvador	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports.	B	Need for production of aeronautical charts according to the ICAO specifications.	State		
AIS 189 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	El Salvador	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports.	A	Need for production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 250 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	El Salvador	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for effective production of this series of aeronautical charts.	State		
AIS 317 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	El Salvador	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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1	2	3	4	5	6	7	8	9	10	11
SLV El Salvador										
ATM 8 CAR	English proficiency in Air Traffic Services CAR/SAM/3 Rec. 5/35	El Salvador	The proficiency in the English language of some ATC units is below the desired level and could be a contributing factor for the ocurrence of incidents and/or aeronautical accidents.	OCT/ 1995	GREPECAS/5. Collaborative actions have been taken with other states for the recurrent training in the English language of air traffic controllers.	A	a) In order to reach and maintain the English language level required, the State shall establish a permanent and continuous training plan of ATC units, which contemplates the follow-up of the improvements of personnel of ATC units. b) The State shall demand the personnel who works in ATC units, the English language knowledge in compliance with ICAO Annex 1.	CAA El Salvador	MAR/ 2010	Continuous training in the use of aeronautical phraseology is provided by ICCAE.
ATM 24 CAR	Use of the aeronautical phraseology	El Salvador	In general, the use of aeronautical phraseology in Spanish and/or English does not meet the required levels and it is a relevant factor with regard to ATS incidents.	SEP/ 2000	ATS/SG/9. Recurrent courses for the use of aeronautical phraseology for air traffic controllers have been implemented.	A	Continuous training in the use of aeronautical phraseology is provided by ICCAE.	CAA El Salvador	MAR/ 2010	
SLV El Salvador										
MET 15 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	El Salvador	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49 .	JUN/ 1996	Review the functions and training of the aeronautical meteorologist.	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	States		
MET 34 CAR	Notify the RVR for CAT I operations (Annex 3, Part I, Chapter 4, Recommendation 4. 6.3.2)	El Salvador	RVR have not been implemented	JUN/ 1996	Plan the acquisition of the RVR	B	To ensure the implementation of required RVR.	State		
MET 50 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	El Salvador	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance.	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements.	States		
MET 67 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	El Salvador	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B.	JUN/ 1996	a) Implement the SIP COM/MET Recommendations for the CAR Region, b) Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	States		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
GRD Grenada										
AGA 123 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4, 3.4.3, 6 & 15)	Grenada, ST. GEORGES, Point Salines Intl	Runway strip is deficient in width, transverse slopes and due to objects as follows:Topography, hangar, western runway end - both north and south corners, Hardy Bay, sea on south side, VOR/DME access road, sewage pond, standby generator, culvert headwalls, drainage ditch, and road, fence and buildings located at the southeast runway end	MAY/ 2001	ICAO Visit May 2001	A	Do not declare a stopway thereby reducing the runway strip length and the western end deficiencies.Delethalise VOR/DME access road embankment and Hardy Bay - Sea culvert headwalls. Widen runway strip by filling the water areas and remove or modify objects located in runway strip.	Grenada	JUN/ 2003	
AGA 124 CAR	Obstacles (Annex 14, Vol. I , Chap. 4, 4.2.10 & 12)	Grenada, ST. GEORGES, Point Salines Intl	Large aircraft tails when parked on the apron and topography are obstacles infringing in the transitional surface	MAY/ 2001	ICAO Visit May 2001	A	Future reconfiguration of the apron should consider eliminating this deficiency	Grenada		
AGA 125 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.5.1, 5.3.5 3 & 5.3.5.23 & ANP Table AOP1)	Grenada, ST. GEORGES, Point Salines Intl	No visual approach slope indicator system is provided for Runway 28	MAY/ 2001	ICAO Visit May 2001	A	Install visual approach slope indicator system for Runway 28 if approaches on Runway 28 are available	Grenada		
AGA 126 CAR	Fencing (Annex 14, Vol. I, Chap. 9, 9.10.1.9.10.4 & 9.10.6)	Grenada, ST. GEORGES, Point Salines Intl	Fencing incomplete around perimeter	MAY/ 2001	ICAO Visit May 2001	A	Provide complete perimeter security barrier	Grenada	APR/ 2003	
AGA 127 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap. 9.2, Rec. 9.2.22 & 26)	Grenada, ST. GEORGES, Point Salines Intl	Access from rescue and fire-fighting services facilities to the runway is not the most direct	MAY/ 2001	ICAO Visit May 2001	A	Designate a direct route across the apron to the existing access road to the runway to ensure minimum response times to both runway ends	Grenada	AUG/ 2003	
AGA 128 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap. 9.2, Rec. 9.2.32 & 33)	Grenada, ST. GEORGES, Point Salines Intl	Present staff levels are considered inadequate for Category 9 with 7 plus a supervisor reported	MAY/ 2001	ICAO Visit May 2001	A	Staff levels should be increased to 9 plus supervisor for Category 9 and 3 vehicles	Grenada	MAR/ 2003	
GRD Grenada										
AIS 55 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Grenada	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO.	A	Need for production of aeronautical charts according to requirements.	State		Obstacles determination.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AIS 128 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Grenada	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 148 CAR	Annex 4 Chap. 16 Append. 5. FASID Table AIS 7.	Grenada	Production of the world aeronautical charts-ICAO not according to the sheet layout index established for this series of chart.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports.	B	Need for production of aeronautical charts according to the established requirements.	State		
AIS 174 CAR	Annex 4Chap. 17.	Grenada	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports.	B	Need for production of aeronautical charts according to the ICAO specifications.	State		
AIS 251 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Grenada	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports.	A	Need for effective production of this series of aeronautical charts.	State		
AIS 318 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Grenada	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	
GRD Grenada										
ATM 25 CAR	Use of the aeronautical phraseology	Grenada	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	ATS/SG/9	A	Continuous training and supervision in the use of aeronautical phraseology is required.	ECCAA	MAR/ 2010	a) CAA carries out periodic ATC unit inspections b) continuation of the process of legislative implementation with respect to language proficiency.
GRD Grenada										
MET 16 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	Grenada	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49	JUN/ 1996	Review the functions and training of the aeronautical meteorologist	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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1	2	3	4	5	6	7	8	9	10	11
MET 35 CAR	Notify the RVR for CAT I operations (Annex 3, Part I, Chapter 4, Recommendation 4. 6.3.2)	Grenada	RVR have not been implemented	JUN/ 1996	Plan the acquisition of the RVR	B	To ensure the implementation of required RVR.	State		
MET 51 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	Grenada	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance.	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements.	State		
MET 69 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Grenada	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B	JUN/ 1996	a) Implement the SIP COM/MET Recommendations for the CAR Region, b) Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
GTM Guatemala										
AGA 3 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3.1 & 3.2 - 3.1.13)	Guatemala, GUATEMALA, La Aurora	The runway longitudinal slope exceeds the limits specified in Annex 14 Vol I Section 3.1.13	DEC/ 1999	ICAO Visit December 1999, May 2001 and June 2006	A	Reduce the runway longitudinal slope during the next runway overlay	Guatemala		
AGA 14 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - 3.4.3 and 3.4.6)	Guatemala, GUATEMALA, La Aurora	Insufficient runway strip width in some parts as specified in Annex 14 Vol I Section 3.4 - 3.4.3 and 3.4.6	DEC/ 1999	ICAO Visit December 1999, May 2001 and June 2006	A	Remove obstacles infringing on the runway strip	Guatemala		
AGA 23 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 3.4)	Guatemala, GUATEMALA, La Aurora	No runway end safety areas are provided on both runway ends as specified in Annex 14 Vol I Section 3.4.1	DEC/ 1999	ICAO Visit December 1999 and May 2001	A	Provide RESAs	Guatemala		
AGA 28 CAR	Obstacles (Annex 14, Vol. I, Chap. 4)	Guatemala, GUATEMALA, La Aurora	Obstacles exist in the approach, take-off, transitional and inner horizontal obstacle limitation surfaces	DEC/ 1999	ICAO Visit December 1999 and May 2001 IATA Letter January 2001	A	ASB recommended:1. DGAC complete surveys to establish obstacles 2. DGAC remove, light and mark obstacles as appropriate 3. DGAC update AIP obstacle charts 4. DGAC update aerodrome obstacle safeguarding plan	Guatemala		
AGA 50 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 and ANP, Table AOP 1)	Guatemala, GUATEMALA, La Aurora	Inadequate approach lighting systems on both runway approaches as specified in Annex 14 Vol I Section 5.3.4	DEC/ 1999	ICAO Visit December 1999 and May 2001	A	Upgrade approach lighting systems	Guatemala		
AGA 129 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.3 - 3.3.2 & 6)	Guatemala, GUATEMALA, La Aurora	Runway end light pits and the disused localiser bases/bolts are objects in the runway strip at both runway ends	MAY/ 2001	ICAO Visit May 2001	A	Cover the lighting pits with aircraft load bearing covers Remove the disused localiser bases/bolts	Guatemala		
AGA 131 CAR	Bird Hazards (Annex 14, Vol. I, Chap. 9.5)	Guatemala, GUATEMALA, La Aurora	Birds were observed hovering above reported waste dump sites off the southern runway end	MAY/ 2001	ICAO Visit May 2001	A	Confirm bird hazard and implement necessary mitigation measures	Guatemala		
AGA 362 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.8)	Guatemala	Taxiway markings - Numerous taxiway centrelines at turning points and on the major apron area are missing	JUN/ 2006	ICAO Visit June 2006	A	Paint turning centreline and apron markings	Guatemala		
AGA 363 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.7)	Guatemala, GUATEMALA, La Aurora	Runway Markings - Runway side stripes are unevenly painted near thresholds and should continue across taxiway entrances.	JUN/ 2006	ICAO Visit June 2006	A	Paint markings as required	Guatemala		
AGA 364 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.5)	Guatemala, GUATEMALA, La Aurora	Runway Markings - Runway lacks aiming point marking aint aiming point marking	JUN/ 2006	ICAO Visit June 2006	A	Paint aiming point marking	Guatemala		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 365 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.10)	Guatemala, GUATEMALA, La Aurora	Runway Markings - Runway holding position markings are improperly painted. Unevenly located as measured from the runway centrelines, faintly marked, or missing.	JUN/ 2006	ICAO Visit June 2006	A	Paint all runway holding marking	Guatemala		
AGA 366 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2)	Guatemala, GUATEMALA, La Aurora	Apron Markings - The apron edge marking of the passenger apron on the north side area should be painted red instead of yellow because the apron quickly drops off more than 3 meters in elevation.	JUN/ 2006	ICAO Visit June 2006	A	Repaint the marking	Guatemala		
AGA 367 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.4.5)	Guatemala, GUATEMALA, La Aurora	Threshold Markings - The pattern of longitudinal stripes have an insufficient number of stripes for a 60 meter wide runway	JUN/ 2006	ICAO Visit June 2006	A	Paint additional stripes for 60 m width runways	Guatemala		
AGA 368 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.4.7)	Guatemala, GUATEMALA, La Aurora	Threshold Markings - The transverse stripe has insufficient width for a 60 meter wide runway.	JUN/ 2006	ICAO Visit June 2006	A	Paint additional width	Guatemala		
AGA 369 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2)	Guatemala, GUATEMALA, La Aurora	Service Roads - Most vehicle service roads entering parallel taxiways to Runway 01/19 lack any type marking or signage to indicate where they are safe from the wingtips of aircraft.	JUN/ 2006	ICAO Visit June 2006	B	Add a highway type marking or warning sign	Guatemala		
AGA 370 CAR	Visual Aids (Annex 14, Vol. I, Chap. 3.5.6)	Guatemala, GUATEMALA, La Aurora	Visual Aids - Approach Lighting Systems are not frangible beyond 60 meters from the runway edge. The area beyond 60 meters off Rwy 19 has a non-frangible fence surrounding the approach lighting systems	JUN/ 2006	ICAO Visit June 2006	A	Make Approach Lighting Systems frangible and object free. Remove fencing located in Runway End 19 that surrounds the approach lighting systems.	Guatemala		
AGA 371 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.4)	Guatemala, GUATEMALA, La Aurora	Visual Aids - Most Taxiway connectors lack mandatory instruction signs. All taxiway connectors at runway end entrances exceed 60-meter widths.	JUN/ 2006	ICAO Visit June 2006	A	Install mandatory instruction signs and paint complementary runway designator markings	Guatemala		
AGA 372 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.3.4)	Guatemala, GUATEMALA, La Aurora	Visual Aids - Approach lighting systems has non-working lights off Runway 19 end	JUN/ 2006	ICAO Visit June 2006	A	Replace non-working lights	Guatemala		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 373 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.4.9)	Guatemala, GUATEMALA, La Aurora	Visual Aids -Painted arrows indicating a displaced threshold are incorrectly painted Yellow	JUN/ 2006	ICAO Visit June 2006	A	Repaint arrows white in colour	Guatemala		
AGA 374 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3.9.7)	Guatemala, GUATEMALA, La Aurora	The separation between the runway and parallel taxiway continues to be insufficient to permit simultaneous operations by some aircraft types. Substandard condition also introduces violations of the inner transitional obstacle limitation surface when certain aircraft taxi.	JUN/ 2006	ICAO Visit June 2006	A	Discontinue simultaneous operations. Complete taxiway relocation as early as possible. Consider providing holding bays at both runway ends with adequate separation from the runway to improve the operational efficiency.	Guatemala		
AGA 375 CAR	Maintenance (Annex 14, Vol. I, Chap. 3.9.12)	Guatemala, GUATEMALA, La Aurora	Pavement Maintenance - Numerous taxiway connectors are in need of serious repairs.	JUN/ 2006	ICAO Visit June 2006	A	Repair pavements. ICAO commented that the number of taxiway connectors could be reduced in number since they were located in very close approximation to the next taxiway connector.The width of the taxiway connectors could not be used by Code B or Code C aircraft undercarriages.	Guatemala		
AGA 376 CAR	Maintenance (Annex 14, Vol. I, Chap. 2.6.6)	Guatemala, GUATEMALA, La Aurora	Pavement Maintenance - Apron pavement strength published in the AIP is incorrect – indicates flexible pavement instead of actual concrete pavement (has been copied from what is declared for the runway). Taxiway pavement strength is not published in the AIP	JUN/ 2006	ICAO Visit June 2006	A	DGAC to provide Boeing through ICAO, the pavement layers' type, depth and age, subgrade characteristics and traffic data. Boeing to calculate PCNs and provide DGAC through ICAOProvide new data as a result of scheduled construction	Guatemala		
AGA 377 CAR	Obstacles (Annex 14, Vol. I, Chap. 4)	Guatemala, GUATEMALA, La Aurora	Helicopter service is very frequent within GUA airspace with helicopters crisscrossing the active runway at various locations. Additionally, there exists a large number of landing helipad pads along both sides of Runway 01/19. ICAO visit in 2001 also observed simultaneous operations between aircraft on the runway and helicopter approaches at a reduced separation.	JUN/ 2006	ICAO Visit June 2006	A	Provide an ATCT Plan that covers helicopter serve while Runway 01/19 is active. DGAC agreed to forward the ATCT plan for review by the ICAO NACC RO/ATM	Guatemala		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 378 CAR	Obstacles (Annex 14, Vol. I, Chap. 9.2.30)	Guatemala, GUATEMALA, La Aurora	Rescue and Fire Fighting - RFF station lacks direct paved access to Runway 01/19.	JUN/ 2006	ICAO Visit June 2006	A	Provide direct paved access to Runway 01/19	Guatemala		
AGA 379 CAR	Runway End Safety Areas (Annex 14, Vol. I, Chap. 3.5)	Flores, GUATEMALA, Mundo Maya	Runway End Safety Areas - No runway end safety areas exist beyond both runway ends. Sufficient once properly prepared exists to declare RESAs off both runway ends. When MGTK declares RESA, several approach light units will need to become frangible.	JUN/ 2006	ICAO Visit June 2006	A	Clear and grade terrain and convert non-frangible approach light system units, etc., to frangible units off both runway ends	Guatemala		
AGA 380 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5)	Flores, GUATEMALA, Mundo Maya	Visual Aids - Remaining markings from former stopways remain; one having improperly chevron markings.	JUN/ 2006	ICAO Visit June 2006	A	Remove all chevron markings off both runway ends.	Guatemala		
AGA 381 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.16.2, 5.2.16.3, 5.2.16.8 Figure 5.9)	Flores, GUATEMALA, Mundo Maya	Mandatory Instruction Sign - Entrance width of Taxiway E onto Runway 10/28 is over 60 meters and should be supplemented with a painted Runway Designator marking and the Runway Side Stripe marking should extend across the entrance.	JUN/ 2006	ICAO Visit June 2006	A	Paint Runway Designator marking and continue Runway Side Strip marking through the taxiway entrance.	Guatemala		
AGA 382 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.5 & 5.2.6)	Flores, GUATEMALA, Mundo Maya	Visual Aids - Runway touchdown zone markings are improperly marked and Aiming Point marking is missing	JUN/ 2006	ICAO Visit June 2006	A	Remove old markings and repaint runway.	Guatemala		
AGA 383 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.2.7)	Flores, GUATEMALA, Mundo Maya	Visual Aids - Runway side stripe markings are very faint, especially on concrete surface.	JUN/ 2006	ICAO Visit June 2006	A	Repaint side stripe markings on both sides of Runway 10/28.	Guatemala		
AGA 384 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.4 & Figure 5-28)	Flores, GUATEMALA, Mundo Maya	Visual Aid Mandatory Instruction Sign for Runway Designator is missing on turn pad at entrance to Runway End 28	JUN/ 2006	ICAO Visit June 2006	A	Install Sign	Guatemala		
AGA 385 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5)	Flores, GUATEMALA, Mundo Maya	Jeppessen chart notes that PAPI location relative to runway threshold is unknown. RO/AGA informed that MGTK would ask COCESNA for certification documentation that PAPI is certified for operation	JUN/ 2006	ICAO Visit June 2006	A	MGTK to submit to OACI documentation certifying that PAPI was correctly installed and operational.	Guatemala		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 386 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5.3.4)	Flores, GUATEMALA, Mundo Maya	Visual Aids - Inadequate approach lighting systems on both runway approaches to Runway 10/28. Under AOP Table 1. Runway End 10 is listed as Category 1 instrument approach. Runway End 28 is listed as a non-precision instrument approach.	JUN/ 2006	ICAO Visit June 2006	A	Upgrade approach lighting systems.	Guatemala		
AGA 387 CAR	Visual Aids (Annex 14, Vol. I, Chap. 3.4.3)	Flores, GUATEMALA, Mundo Maya	Width is insufficient and it should be cleared of tall shrubs and small trees that exist beyond the graded portion of the runway strip.	JUN/ 2006	ICAO Visit June 2006	A	Clear tall shrubs and small trees.	Guatemala		
AGA 388 CAR	Runway Strip (Anexo 14, Vol. I, Cap. 3.4.6 y 3.4.7)	Flores, GUATEMALA, Mundo Maya	One small shed exists within the graded portion of the runway strip	JUN/ 2006	ICAO Visit June 2006	A	Remove shed.	Guatemala		
AGA 389 CAR	Runway Strip (Anexo 14, Vol. I, Cap. 3.4.6)	Flores, GUATEMALA, Mundo Maya	Open, very wide and very deep canal running parallel to the runway for over 100 metres that exists within the graded portion of the runway strip. Open type canals are classified as obstacles	JUN/ 2006	ICAO Visit June 2006	A	Remove or cover canal with cover that is capable to support the heaviest aircraft weight.	Guatemala		
AGA 390 CAR	Runway Strip (Anexo 14, Vol. I, Cap. 3.11.3)	Flores, GUATEMALA, Mundo Maya	Taxiway Strips - An electrical junction box along Taxiway G is over 30 centimetres above ground level.	JUN/ 2006	ICAO Visit June 2006	A	Lower the electrical junction box	Guatemala		
AGA 391 CAR	Obstacles (Anexo 14, Vol. I, Cap. 3.4.6)	Flores, GUATEMALA, Mundo Maya	A few electric boxes located along Runway 10/28 are too high any poise a danger to aircraft during veer offs.	JUN/ 2006	ICAO Visit June 2006	A	Lower electric boxes	Guatemala		
AGA 392 CAR	Obstacles (Anexo 14, Vol. I, Cap. 4.1 & Figure 4-1)	Flores, GUATEMALA, Mundo Maya	Obstacles - Unused radio tower located along Runway 10/28 violates inner transitional obstacle limitation surface.	JUN/ 2006	ICAO Visit June 2006	A	Remove unused radio tower	Guatemala		
AGA 393 CAR	Obstacles (Anexo 14, Vol. I, Cap. 3.4.6)	Flores, GUATEMALA, Mundo Maya	Electrical boxes off runway ends within runway strip are a few inches above ground level. MGTK did place ramp type devices in front of the electric boxes in case of overruns	JUN/ 2006	ICAO Visit June 2006	A	Lower electrical boxes and, if RESAs are declared, then modify non-frangible approach light system units to frangible	Guatemala		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 394 CAR	Obstacles (Anexo 14, Vol. I, Cap. 4)	Flores, GUATEMALA, Mundo Maya	Lack of local legislation to protect (1) existing clear air space for approaches and departures off both runway ends and (2) against the introduction of waste sites near the MGTK	JUN/ 2006	ICAO Visit June 2006	A	Work with local and state officials to develop enforceable legislation	Guatemala		
AGA 395 CAR	Rescue and Fire Fighting Services (Annex 14, Vol. I, Chap. 9.2.30	Flores, GUATEMALA, Mundo Maya	Rescue and Fire Fighting - RFF station lacks direct access to Runway 10/28.RO/AGA informed that MGTK will be constructing new RFF station across Runway 10/28 from the existing site having direct and clear access	JUN/ 2006	ICAO Visit June 2006	A	Start and finish RFF station construction and report to OACI that RFF is in operation	Guatemala		
AGA 396 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 5.2.1, 5.2.2 & 5.2.3)	Flores, GUATEMALA, Mundo Maya	Non-Load Bearing Surfaces. Taxiway side stripes are faint in certain locations	JUN/ 2006	ICAO Visit June 2006	A	Repaint side marking with double stripes	Guatemala		
AGA 397 CAR	Fencing (Annex 14, Vol. I, Chap. 9.10.1)	Flores, GUATEMALA, Mundo Maya	Fencing - A wildlife preserve primarily for deer located adjacent to Runway 10/28 lacks any fencing to prohibit wildlife from entering Runway 10/28	JUN/ 2006	ICAO Visit June 2006	A	Install fencing outside runway strip	Guatemala		
GTM Guatemala										
AIS 11 CAR	Annex 15, Chap. 4, Para. 4.2.9; Doc. 8733, Basic ANP, Part VIII, Paras 36 to 37	Guatemala	Lack of regular and effective updating of the AIP Document	OCT/ 2000	GREPECAS AIS/MAP Subgroup	A	Need to keep updated the information/data contained in the AIP	State		
AIS 36 CAR	Annex 15, Para. 3.6.4; Annex 4, Para. 2.18; Doc. 8733, Basic ANP, Part VIII, Paras 50 to 58, FASID Table AIS 5	Guatemala	Partial implementation of the WGS-84	JAN/ 1998	GREPECAS AIS/MAP Subgroup Survey to States	A	Need to implement the WGS-84 Geodetic System	State	NOV/ 2006	Obstacles determination.
AIS 56 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Guatemala	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State		Obstacles determination.
AIS 93 CAR	Doc. 8733 Basic ANP, Part VIII, Para.24	Guatemala	Lack of use of English for plain language texts.	SEP/ 1996	Records/files NACC RO; GREPECAS reports. No action plan reported.	A	Need of use of English for plain language texts.	State		
AIS 99 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 9 to 12	Guatemala	Lack of highest priority for printing of AIS publications.	SEP/ 1996	Records/files NACC RO; GREPECAS reports	A	Need to provide a higher priority for the printing of AIS publications	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AIS 112 CAR	Annex 15 Chap. 8; Doc. 8733 Basic ANP, Part VIII, Para. 25; FASID Tables AIS 1 and 2	Guatemala	Pre- flight information/(implementation of required AIS aerodrome units).	SEP/ 1996	Records/files NACC RO. No action plan reported.	B	Need for effective implementation of required AIS aerodrome units.	State		
AIS 129 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Guatemala	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 175 CAR	Annex 4Chap. 17.	Guatemala	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the ICAO specifications.	State		
AIS 190 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Guatemala	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 207 CAR	Annex 4 Chap. 3; Doc. 8733 Basic ANP, Part VIII, Paras. 59 a) and 64 1); FASID Table AIS 6	Guatemala	Partial application of ICAO requirements for the production of Aerodrome obstacle chart-ICAO Type A.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports.	A	Need for effective production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 252 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Guatemala	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for effective production of this series of aeronautical charts.	State		
AIS 264 CAR	Annex 4 Chap. 7; Doc 8733 Basic ANP, Part VIII, Paras. 59 d) and 64 4); FASID Table AIS 6	Guatemala	Partial application of ICAO requirements for the production of En route Navigation Charts-ICAO.	SEP/ 1996	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Effective application of ICAO requirements for the production of En route chart-ICAO.	State		
AIS 319 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Guatemala	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State		

GTM Guatemala

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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CNS 18 CAR	ATS Speech Circuits Plan (Table CNS 1C) - La Mesa APP - Puerto Barrios TWR	Guatemala- Honduras-COCESNA	The required circuit is not implemented. An IDD is being used.	NOV/ 1999	COCESNA informed that the required circuit is not being implemented, due to the fact that there are no facilities, but possible communications links will be analyzed.	B	COCESNA informed that the airport changed to national category. Action Plan: The category of the Puerto Barrios airport was changed to domestic; therefore, this circuit is no longer an international requirement.	Guatemala, Honduras and COCESNA		
GTM Guatemala										
MET 17 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	Guatemala	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49	JUN/ 1996	Review the functions and training of the aeronautical meteorologist	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	States		
MET 36 CAR	Notify the RVR for CAT I operations (Annex 3, Part I, Chapter 4, Recommendation 4. 6.3.2)	Guatemala	RVR have not been implemented	JUN/ 1996	Plan the acquisition of the RVR	B	To ensure the implementation of required RVR.	State		
MET 52 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	Guatemala	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies.	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance.	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements.	States		
MET 70 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Guatemala	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B.	JUN/ 1996	a) Implement the COM/MET SIP Recommendations for the CAR Region; and b) Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	States		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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HTI Haiti										
AGA 7 CAR	Taxiway Parallel to Runway (ANP, Table AOP 1)	Haiti, PORT AU PRINCE, Port au Prince Intl	No parallel taxiway	JUN/ 2000	ICAO Visit June 2000	B	Provide a full-length parallel taxiway	Haiti		
AGA 29 CAR	Obstacles (Annex 14, Vol. I, Chap. 4, 4.2.13 - 4.2.18)	Haiti, CAP HAITIEN, Cap Haitien Intl	Obstacles exist in the approach, take-off and transitional obstacle limitation surfaces	JUN/ 2000	ICAO Visit June 2000	A	Eliminate obstacles	Haiti		
AGA 52 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.5.23 and ANP, Table AOP 1)	Haiti, CAP HAITIEN, Cap Haitien Intl	No PAPIs	JUN/ 2000	ICAO Visit June 2000	A	Install PAPIs	Haiti		
AGA 53 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 Rec. 5.3.4.1 and ANP, Table AOP 1)	Haiti, CAP HAITIEN, Cap Haitien Intl	No approach lighting system on Rwy 23	JUN/ 2000	ICAO Visit June 2000	A	Install approach lighting system	Haiti		
AGA 54 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.4.1 and ANP, Table AOP 1)	Haiti, PORT AU PRINCE, Port au Prince Intl	No approach lighting systems	JUN/ 2000	ICAO Visit June 2000	A	Install approach lighting systems	Haiti		
AGA 55 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.4.1.1 and ANP, Table AOP 1)	Haiti, PORT AU PRINCE, Port au Prince Intl	No signs	JUN/ 2000	ICAO Visit June 2000	A	Install signs	Haiti		
AGA 62 CAR	Fencing (Annex 14, Vol. I, Chap. 9, 9.10.2 - 9.10.6)	Haiti, CAP HAITIEN, Cap Haitien Intl	No perimeter security barrier	JUN/ 2000	ICAO Visit June 2000	A	Install perimeter security barrier	Haiti		On-going.
AGA 68 CAR	Rescue and Fire Fighting Service and Airport Emergency Planning (Annex 14, Vol. I, Chap. 9.1 & 9.2)	Haiti, CAP HAITIEN, Cap Haitien Intl	RFFS deficient	JUN/ 2000	ICAO Visit June 2000	A	Upgrade RFFS	Haiti		
AGA 69 CAR	Rescue and Fire Fighting Service and Airport Emergency Planning (Annex 14, Vol. I, Chap. 9.1 & 9.2)	Haiti, CAP HAITIEN, Cap Haitien Intl	No AEP	JUN/ 2000	ICAO Visit June 2000	A	Prepare AEP and undertake emergency exercise	Haiti		
AGA 81 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2.1 & 10.2.2)	Haiti, PORT AU PRINCE, Port au Prince Intl	Runway surface pavement rubber deposit accumulation.	JUN/ 2000	ICAO Visit June 2000	A	Remove rubber	Haiti		
AGA 82 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10.2, 10.2.1 & 10.2.2)	Haiti, PORT AU PRINCE, Port au Prince Intl	Apron surface pavement irregularities.	JUN/ 2000	ICAO Visit June 2000	A	Upgrade pavements	Haiti		
HTI Haiti										
AIS 87 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 61 to 64, FASID Table AIS 7	Haiti	Lack of production of the World Aeronautical Chart ICAO 1:1000 000	NOV/ 1994	Records/files NACC RO; GREPECAS report. No action plan reported.	B	Need for production of ICAO Aeronautical World Chart 1:1000,000	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AIS 113 CAR	Annex 15 Chap. 8; Doc. 8733 Basic ANP, Part VIII, Para. 25; FASID Tables AIS 1 and 2	Haiti	Pre- flight information/(implementation of required AIS aerodrome units).	SEP/ 1996	Records/files NACC RO. No action plan reported.	B	Need for effective implementation of required AIS aerodrome units.	State		
AIS 130 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Haiti	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 149 CAR	Annex 4 Chap. 16 Append. 5. FASID Table AIS 7.	Haiti	Production of the world aeronautical charts-ICAO not according to the sheet layout index established for this series of chart.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the established requirements.	State		
AIS 320 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Haiti	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	
HTI Haiti										
ATM 5 CAR	Provision of Aerodrome Control Services	Haiti/Cap. Haitien Aerodrome	Aerodrome control services are not provided at Cap. Haitien Aerodrome	MAY/ 1998	Mission to the State NACC Office	A	Aerodrome control services should be provided at Cap. Haitien	CAA Haiti	DEC/ 2003	The first stage is to keep flight information in Cap Haitien airport in the mid term and make the necessary changes. This project is on-going, and meanwhile work is done for a new airport project.
HTI Haiti										
MET 2 CAR	SIGMET information (Annex 3, Part I, Chapter 7, standard 7.1.1)	Haiti	Not all SIGMET messages are prepared based on the procedures established by ICAO.	MAY/ 1996	a) Implement the COM/MET SIP recommendations for the CAR Region; and b) make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A	Ensure the correct elaboration of SIGMETs and their dissemination in accordance with the requirements of Table MET 2A.	State	APR/ 2003	TC, CB and VA should be reported in SIGMET but TC and VA occasionally affect Port-au-Prince FIR, TC advisories are issued by Miami TCRC and TC and CB cloud systems may be identified in satellite pictures.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
MET 18 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	Haiti	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49.	JUN/ 1996	Review the functions and training of the aeronautical meteorologist	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	States		
MET 37 CAR	Notify the RVR for CAT I operations (Annex 3, Part I, Chapter 4, Recommendation 4. 6.3.2)	Haiti	RVR have not been implemented.	JUN/ 1996	Plan de acquisition of the RVR	B	To ensure the implementation of required RVR.	State		
MET 53 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	Haiti	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements.	States		
MET 71 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Haiti	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B	JUN/ 1996	a) Implement the COM/MET SIP Recommendations for the CAR Region; and b) Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	States		
HTI Haiti										
SAR 1 CAR	Search and Rescue facilities CAR/SAM/3 Rec. 6/2	Haiti SRR/RCC Port-au-Prince	Search and Rescue	OCT/ 2005	GREPECAS/5., RO ATM/SAR mission in April 2005.	A	A SAR Committee has been put in place in order to prepare the appropriate documentation, make the necessary coordination and implement the SAR Unit. The Procedural Manual and Operation Manual have been adopted. Letters of agreement with different units have been discussed and will be signed soon. A SAR Unit coordinator has been appointed and training is under way to make this unit functional as soon as possible. It is expected that the SAR Unit will be fully operational by the first semester of 2009.	CAA Haiti	JUL/ 2009	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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HND Honduras										
AGA 178 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3.1 & 3.2 - 3.2.1)	Honduras, TEGUCIGALPA, Intl Toncontín	The Runway has no shoulders	NOV/ 2001	ICAO Visit November 2001	B	Provide runway shoulders	Honduras		
AGA 179 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4, 3.4.1,3.4.2, 3.4.6, 3.4.8, 3.4.10, 3.4.12 through 3.4.17)	Honduras, TEGUCIGALPA, Intl Toncontín (MHTG)	Runway strip length is insufficient in the southern part of the runway	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Increase runway strip length by removing objects or reducing declared distances for Runway 19	Honduras		
AGA 180 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4, 3.4.4 - 3.4.8, 3.4.10, 3.4.12 - 3.4.17)	Honduras, TEGUCIGALPA, Intl Toncontín	Runway strip width is insufficient at both ends of the runway	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Increase runway strip width by removing objects or reducing runway declared distances	Honduras		
AGA 181 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.3, 3.3.5 y 3.5)	Honduras, TEGUCIGALPA, Intl Toncontín	Runway strip width is insufficient in the northeast area and contains objects including walls, buildings and trees	NOV/ 2001	ICAO Visit November 2001	A	Increase runway strip width by removing objects	Honduras		
AGA 182 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 3.5 - 3.5.1, 3.5.2, 3.5.4, 3.5.6)	Honduras, TEGUCIGALPA, Intl Toncontín	There are no runway end safety areas at both ends of the runway	NOV/ 2001	ICAO Visit November 2001& July 2006	A	Provide runway end safety areas by removing objects or reducing declared distances for the runway	Honduras		
AGA 183 CAR	Obstacles (Annex 14, Vol. I, Chap. 4 - 4.2.5)	Honduras, TEGUCIGALPA, Intl Toncontín	Obstacles infringing on the approach and transitional surfaces include topography, buildings, wall, trees and aircraft parked in the apron	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Remove, light and/or mark obstacles	Honduras		
AGA 184 CAR	Obstacles (Annex 14, Vol. I, Chap. 4 - 4.2.27)	Honduras, TEGUCIGALPA, Intl Toncontín	Obstacles infringing on the take off climb surfaces include topography and vegetation, on Runway 19 also includes fencing and road	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Remove fencing and road at the southern end or reduce declared distances for Runway 19	Honduras		
AGA 185 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.4.1 and ANP FASID Table AOP1)	Honduras, TEGUCIGALPA, Intl Toncontín	Runway has no approach lighting systems	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Provide simple approach lighting systems	Honduras		
AGA 186 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.16.1)	Honduras, TEGUCIGALPA, Intl Toncontín	Taxiways do not have edge lights	NOV/ 2001	ICAO Visit November 2001	A	Provide edge lights for taxiways	Honduras		
AGA 187 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.4.1.1)	Honduras, TEGUCIGALPA, Intl Toncontín	There are no signs in the airfield	NOV/ 2001	ICAO Visit November 2001	A	Provide signs in the airfield	Honduras		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 188 CAR	Fencing (Annex 14, Vol. I, Chap. 8.4 - 8.4.1)	Honduras, TEGUCIGALPA, Intl Toncontín	A dog was observed on the runway	NOV/ 2001	ICAO Visit November 2001	A	Check for deficiencies in the perimeter fencing and gates to correct them and ensure that animals cannor enter the movement area. If animals live in the airport, to remove them	Honduras		
AGA 189 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 9.4 - 9.4.3)	Honduras, TEGUCIGALPA, Intl Toncontín	Pavement surfaces on the taxiways and apron are defficient	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Improve pavements on the taxiways and apron	Honduras		
AGA 190 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 9.4 - 9.4.3, 4 & 10)	Honduras, TEGUCIGALPA, Intl Toncontín	The surface of the runway has irregularities in several areas, with loose stones and rubber deposits	NOV/ 2001	ICAO Visit November 2001	A	Remove loose stones through continuous monitoring, remove rubber and repair the runway pavement surface	Honduras		
AGA 191 CAR	Bird Hazard (Annex 14, Vol. I, Chap 9.5)	Honduras, TEGUCIGALPA, Intl Toncontín	Several birds were observed flying over the waste disposal sites reported to be located near the northeast end of the runway and overflying the runway during aircraft operations	NOV/ 2001	ICAO Visit November 2001	A	Confirm bird hazard and implement mitigation measures as necessary.	Honduras		
AGA 192 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4.2)	Honduras, SAN PEDRO SULA, Intl. La Mesa	Runway Strip length is insufficient	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Provide runway strip by reducing declared stopways	Honduras		
AGA 193 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4.2)	Honduras, SAN PEDRO SULA, Intl. La Mesa	Runway Strip width in the southeast part is insufficient	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Increase the runway strip width by expanding the boundaries of the aerodrome property	Honduras		
AGA 194 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 3.5)	Honduras, SAN PEDRO SULA, Intl. La Mesa	There are no runway end safety areas at both ends of the runway	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Provide RESAs by reducing stopways and declared distances	Honduras		
AGA 195 CAR	Visual Aids (Annex 14, Vol. I, Chap 5 - 5.2.2.4 & 5)	Honduras, SAN PEDRO SULA, Intl. La Mesa	Runway designation markings at both ends are incorrect because they indicate the presence of two parallel runways	NOV/ 2001	ICAO Visit November 2001	A	Correct the runway designation markings	Honduras		
AGA 196 CAR	Visual Aids (Annex 14, Vol. I, Chap 5 - 5.2.8, 7.2.1 - 7.2.3)	Honduras, SAN PEDRO SULA, Intl. La Mesa	Markings on the parallel taxiway are incorrect because are for a runway	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Correct the centreline marking in the parallel taxiway and remove the runway markings	Honduras		
AGA 197 CAR	Visual Aids (Annex 14, Vol. I, Chap 5 - 5.4.1.1)	Honduras, SAN PEDRO SULA, Intl. La Mesa	There are no signs in the airfield	NOV/ 2001	ICAO Visit November 2001	A	Provide illuminated signs in the airfield	Honduras		
AGA 198 CAR	Visual Aids (Annex 14, Vol. I, Chap 7.3.1-7.3.3 & 5.3.15)	Honduras, SAN PEDRO SULA, Intl. La Mesa	Runway 04 has incorrect chevron markings in the area located before the threshold	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Remove the chevron markings in the area located before the threshold on Runway 04	Honduras		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AGA 199 CAR	Rescue and Fire Fighting Service and Airport Emergency Planning (Annex 14, Vol. I, Chap. 9.1 & 9.2 - 9.2.19, 20, 25, 31, 32 and 38)	Honduras, SAN PEDRO SULA, Intl. La Mesa	It was reported that the extinguishing agents reserves are insufficient, the rescue equipment in vehicles is insufficient, vehicles are in poor condition, communications and alert systems are defficient and the protection equipment for the personnel is innadequate	NOV/ 2001	ICAO Visit November 2001	A	Maintain required extinguishing agent reserves Provide the required rescue equipment in vehicles Maintain vehicles in adequate condition Maintain adequate communications and alert systems Provide personnel with required protection equipment	Honduras		
AGA 200 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 9.4 - 9.4.3)	Honduras, SAN PEDRO SULA, Intl. La Mesa	The surfaces of the taxiway that enters Runway 04 and the old part of the parallel taxiway, the runway shoulders and the stopway in the northeast end of the runway are defficient	NOV/ 2001	ICAO Visit November 2001	A	To upgrade the taxiway, runway shoulder and stopway pavements	Honduras		
AGA 201 CAR	Visual Aids (Annex 14, Vol. I, Chap 10.2.8 & Table 5-1, note B)	Honduras, SAN PEDRO SULA, Intl. La Mesa	Runway markings are defficient	NOV/ 2001	ICAO Visit November 2001 & July 2006	A	Repaint runway markings	Honduras		
AGA 202 CAR	Bird Hazard (Annex 14, Vol. I, Chap 9.5)	Honduras, SAN PEDRO SULA, Intl. La Mesa	Big birds were observed on the runway strip	NOV/ 2001	ICAO Visit November 2001	A	Confirm bird hazard and implement mitigation measures as necessary	Honduras		
AGA 408 CAR	Visual Aids (Annex 14, Vol.I, Chap.7.3, 7.3.1 - 7.3.3 & Figure 7-2)	Honduras TEGUCIGALPA, Intl Toncontín	Both stopways off the runway ends need proper chevron and edge markings	JUL/ 2006	ICAO Visit July 2006	A	Paint non-white missing markings	Honduras		
AGA 409 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5.2.8.1 - 5.2.8.7)	Honduras TEGUCIGALPA, Intl Toncontín	Several curved taxiway centreline markings exiting/entering Runway 02/20 are very faint and need repainting, such as connector Taxiway D	JUL/ 2006	ICAO Visit July 2006	A	Repaint curved taxiway centrelines	Honduras		
AGA 410 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5.4, 5.4.3 Figure 5-29)	Honduras TEGUCIGALPA, Intl Toncontín	The colour scheme yellow letter on a black background for Taxiway D is reversed in colour	JUL/ 2006	ICAO Visit July 2006	A	Install a new signage panel showing black letter on yellow background	Honduras		
AGA 411 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5.2.10 & Figure 5-6)	Honduras TEGUCIGALPA, Intl Toncontín	Several Runway-Holding Position markings do not extend completely across the taxiway width nor connect with the taxiway side stripe markings, such as Taxiway B, Taxiway E	JUL/ 2006	ICAO Visit July 2006	A	Extend the markings at all taxiways	Honduras		
AGA 412 CAR	Visual Aids (Annex 14, Vol.I, Chap. 7.2.1 -7.2.3)	Honduras TEGUCIGALPA, Intl Toncontín	Taxiway E lacks taxi side stripes or taxiway edge lights	JUL/ 2006	ICAO Visit July 2006	A	Paint taxi side stripe markings	Honduras		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 413 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5.4.2.8)	Honduras TEGUCIGALPA, Intl Toncontín	The sign for the Runway Designator and Taxiway Location, A-02, needs to be relocated and co-located with the Runway-Holding Point marking for Taxiway A	JUL/ 2006	ICAO Visit July 2006	A	Relocate sign	Honduras		
AGA 414 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3.9.7 & Table 3-1 Columns #4 & #8)	Honduras TEGUCIGALPA, Intl Toncontín	There is insufficient separation between Runway 02/20 and parallel Taxiway A to permit simultaneous operations of certain aircraft types	JUL/ 2006	ICAO Visit July 2006	B	Implement an ATCT operational plan that addresses the condition	Honduras		
AGA 415 CAR	Obstacles (Annex 14, Vol. I, Chap. 3.4.6)	Honduras TEGUCIGALPA, Intl Toncontín	The concrete bases of the runway end identification lights [REIL] off Runway End 02 are too high above the ground	JUL/ 2006	ICAO Visit July 2006	A	Lower concrete bases	Honduras		
AGA 416 CAR	Obstacles (Annex 14, Vol. I, Chap. 3.9.7 & Table 3-1 Column # 11)	Honduras TEGUCIGALPA, Intl Toncontín	Abandon DC-3 towards Runway End 20 is too close to the adjacent taxiway	JUL/ 2006	ICAO Visit July 2006	A	Move DC-3 beyond the required distance of taxiway centreline to object under column #11 of Table 3-1	Honduras		
AGA 417 CAR	Obstacles (Annex 14, Vol. I, Chap. 3.4.6 & 3.4.7)	Honduras TEGUCIGALPA, Intl Toncontín	Canals for drainage exists in the graded portion of the runway strip are classified as objects. The long canal covered with concrete slabs adjacent the runway that starts near Runway End 20 does not have an adequate cover to support aircraft loads. An uncovered canal is adjacent to the runway closer to Runway End 02. Several rock and concrete debris piles are found adjacent to the covered canal	JUL/ 2006	ICAO Visit July 2006	A	Remove all rock and concrete debris piles and either install drain pipes that are cover by earth or replace existing cover with appropriate covers	Honduras		
AGA 418 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5.3.4.10 through 5.3.4.21)	Honduras, SAN PEDRO SULA, Intl. Ramón Villeda Morales	Approach lighting system [ALS] for Runway End 22 is a modified 420 meter ALSF-I with sequenced flashing lights	JUL/ 2006	ICAO Visit July 2006	A	Obtain permission to install lacking row of lights and centreline lights to achieve a 900 m length ALS on the adjoining property that is level	Honduras		
AGA 419 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5.2.14.1 through 5.2.14.4)	Honduras, SAN PEDRO SULA, Intl. Ramón Villeda Morales	Existing apron safety lines used at gate areas are not wide enough for wingspans of narrow bodied aircraft, such as A319, A320	JUL/ 2006	ICAO Visit July 2006	A	Repaint those redlines that are insufficient in wingspan clearances	Honduras		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 420 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3.9.7 & Table 3-1, columns #4 & #8))	Honduras, SAN PEDRO SULA, Intl. Ramón Villeda Morales	There is insufficient separation between Runway 04/22 and parallel Taxiway A to permit simultaneous operations of certain aircraft types	JUL/ 2006	ICAO Visit July 2006	B	Implement an ATCT operational plan that addresses the condition	Honduras		
AGA 421 CAR	Obstacles (Annex 14, Vol. I, Chap. 4)	Honduras, SAN PEDRO SULA, Intl. Ramón Villeda Morales	Presently, no legislate is in place to protect the clear approach/departure surfaces from the introduction of obstacles	JUL/ 2006	ICAO Visit July 2006	A	DGAC and MHLM to negotiate with local jurisdictions for the implementation of enforceable legislation to protect against the introduction of obstacles	Honduras		
AGA 422 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap.9)	Honduras, SAN PEDRO SULA, Intl. Ramón Villeda Morales	Silver suits for fire fighters need replacement due to excessive wear, numerous, large unprotected surface areas	JUL/ 2006	ICAO Visit July 2006	A	Replace with new silver suits	Honduras		
AGA 423 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap.9.2.3, 9.2.5, 9.2.8, Table 9-2 & 9.2.33)	Honduras, SAN PEDRO SULA, Intl. Ramón Villeda Morales	The RFF category should be increased from 6 to 7	JUL/ 2006	ICAO Visit July 2006	A	Declared and report to OACI RFF category has been increased from 6 to 7. Additionally report the change to the AIP and table 1	Honduras		
HND Honduras										
AIS 13 CAR	Annex 15, Chap. 4, Para. 4.2.9; Doc. 8733, Basic ANP, Part VIII, Paras 36 to 37	Honduras	Lack of regular and effective updating of the AIP Document	OCT/ 2000	GREPECAS AIS/MAP Subgroup	A	Need to keep updated the information/data contained in the AIP	State		
AIS 58 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Honduras	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State		Obstacles determination.
AIS 76 CAR	Annex 15, Chapter 4, Paras. 4.2.8 and 4.3.4., Chapter 6; Doc 8733 Basic ANP Part VIII, Paras. 45 to 49	Honduras	Lack of effective compliance with the AIRAC system requirement	NOV/ 1994	Records/files NACC RO; GREPECAS reports. No action plan reported.	A	Need for an effective application of AIRAC requirements	State		
AIS 94 CAR	Doc. 8733 Basic ANP, Part VIII, Para.24	Honduras	Lack of use of English for plain language texts.	SEP/ 1996	Records/files NACC RO; GREPECAS reports. No action plan reported.	A	Need of use of English for plain language texts.	State		
AIS 101 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 9 to 12	Honduras	Lack of highest priority for printing of AIS publications.	SEP/ 1996	Records/files NACC RO; GREPECAS reports	A	Need to provide a higher priority for the printing of AIS publications	State		
AIS 131 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Honduras	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AIS 176 CAR	Annex 4Chap. 17.	Honduras	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the ICAO specifications.	State		
AIS 192 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Honduras	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 254 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Honduras	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for effective production of this series of aeronautical charts.	State		
AIS 267 CAR	Doc 8733 Basic ANP, Part VIII, Paras. 59 k), 61, 62. 64 7) and FASID Table AIS 7.	Honduras	Lack of production of the World Aeronautical Chart ICAO 1:1000 000	JAN/ 1994	Records/files NACC RO; GREPECAS reports	B	Need to produce the chart.	State		
AIS 321 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Honduras	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	
HND Honduras										
ATM 10 CAR	English proficiency in Air Traffic Services CAR/SAM/3 Rec. 5/35	Honduras	The proficiency in the English language of some ATC units is below the desired level and could be a contributing factor for the ocurrence of incidents and/or aeronautical accidents.	OCT/ 1995	GREPECAS/5	A	a) The required English language evaluation was carried out and effectively, its was noted that 60% of the Air Traffic Controllers presented the deficiency. b) It has been required to ensure that the recruitment of new personnel be done in accordance with ICAO standards, as well as English proficiency.	CAA Honduras	MAR/ 2010	Continuous training in the use of aeronautical phraseology provided by ICCAE.
ATM 28 CAR	Use of the aeronautical phraseology	Honduras	In general, the use of aeronautical phraseology in Spanish and/or English does not meet the required levels and it is a relevant factor with regard to ATS incidents.	SEP/ 2000	ATS/SG/9	A	Continuous training in the use of aeronautical phraseology is provided by ICCAE.	CAA Honduras	MAR/ 2010	
HND Honduras										

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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MET 19 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	Honduras	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49	JUN/ 1996	Review the functions and training of the aeronautical meteorologist	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	DGCA		
MET 38 CAR	Notify the RVR for CAT I operations (Annex 3, Part I, Chapter 4, Recommendation 4. 6.3.2)	Honduras	RVR have not been implemented	JUN/ 1996	Plan the acquisition of the RVR	B	To ensure the implementation of required RVR.	DGCA		
MET 72 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Honduras	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B.	JUN/ 1996	a) Implement the COM/MET SIP Recommendations for the CAR Region; and b) Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	DGCA		
MET 81 CAR	Establishment of a meteorological watch office (MWO) (Annex 3, App. 3, Estándar 3.4.1 and Table MET 2B of CAR/SAM FASID).	Honduras	Honduras does not have adequate instalations for the MWO of Tegucigalpa.	SEP/ 2005		B		DGCA		MWO requires better installations and communications since it issues SIGMET for Central American FIR.
MET 82 CAR	Aeronautical weather information (Annex 3, Chap. 8, Standard 8.1.1)	Honduras	No aerodrome weather tables are being prepared, nor aerodrome weather summaries.	SEP/ 2005		B		DGCA		
MET 83 CAR	Flight documentation (Annex 3, Chap 9, Standard 9.3.4)	Honduras	No flight documentation is being prepared.	SEP/ 2005		A		DGCA		The MET office is equipped with a WAFS workstation but requires communication facilities to provide flight documentation to distant users.
MET 84 CAR	Communications (Annex 3, Chap. 11, Standards 11.1.1, 11.1.2, 11.1.4)	Honduras	These requirements are not being complied.	SEP/ 2005		A		DGCA		MWO is linked to AFTN but better communications, including Internet are required to contact Washington VACC volcanic observatories and ATS, AIS and MET units in Central America.
MET 85 CAR	Exchange of special airreports (Annex 3, Chap. 5, Standard 5.9)	Honduras / ATS Units	ATS units do not document special AIREP to MET units.	SEP/ 2005	Develop an ATS/MET letter of agreement and make a follow-up in order to comply with that established on it.	A		DGCA		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
JAM Jamaica										
AGA 4 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3, Rec. 3.1.3)	Jamaica, KINGSTON, Norman Manley Intl	The runway longitudinal slope exceeds the limits specified in Annex 14 Vol I Section 3.1.13	OCT/ 2000	ICAO Visit October 2000	B	Reduce the runway longitudinal slope during the next runway overlay	Jamaica		
AGA 5 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3, 3.1 & 3.2.1)	Jamaica, MONTEGO BAY, Sangster Intl	Runway shoulders are not provided as specified in Annex 14, Vol. I, Section 3.2.1	OCT/ 2000	ICAO Visit October 2000	B	Provide runway shoulders during next runway upgrading	Jamaica		
AGA 15 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3, 3.4, 3.4.2.3)	Jamaica, KINGSTON, Norman Manley Intl	Runway strip extension length and width at both runway ends is less than specified in Annex 14 Vol. I Sections 3.3.2 and 4	OCT/ 2000	ICAO Visit October 2000	A	Extend and widen runway strip or reduce runway declared distances	Jamaica		
AGA 16 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3, 3.4, 3.4.2.3)	Jamaica, KINGSTON, Norman Manley Intl	Runway strip contains obstacles and does not comply with the specifications in Annex 14 Vol. I Section 3.3.6	OCT/ 2000	ICAO Visit October 2000	A	Remove obstacles in runway strip	Jamaica		
AGA 17 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.3)	Jamaica, MONTEGO BAY, Sangster Intl	Runway strip extension length on west runway end and width at both runway ends is less than specified in Annex 14 Vol. I Sections 3.3.2, 3 and 4	OCT/ 2000	ICAO Visit October 2000	A	Extend and widen runway strip or reduce runway declared distances	Jamaica		
AGA 18 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3, 3.4, 3.4.7)	Jamaica, MONTEGO BAY, Sangster Intl	Runway strip contains obstacles and does not comply with the specifications in Annex 14 Vol. I Section 3.3.6	OCT/ 2000	ICAO Visit October 2000	A	Remove obstacles in runway strip	Jamaica		
AGA 19 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.3, Section 3.3.16)	Jamaica, MONTEGO BAY, Sangster Intl	Runway graded strip contains ponds and does not comply with the specifications in Annex 14 Vol. I, Section 3.3.16	OCT/ 2000	ICAO Visit October 2000	A	Remove ponds in runway strip	Jamaica		
AGA 24 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 5.3.5.1)	Jamaica, KINGSTON, Norman Manley Intl	No runway end safety areas are provided on both runway ends as specified in Annex 14 Vol I Section 3.4.1	OCT/ 2000	ICAO Visit October 2000	A	Provide runway end safety areas by extending the platform or reducing the declared distances	Jamaica		
AGA 25 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 5, 5.3.5.1)	Jamaica, MONTEGO BAY, Sangster Intl	No runway end safety area is provided on the western runway end as specified in Annex 14 Vol I Section 3.4.1	OCT/ 2000	ICAO Visit October 2000	A	Provide runway end safety area by extending the platform or reducing the declared distances	Jamaica		
AGA 30 CAR	Obstacles (Annex 14, Vol. I, Chap. 4, 4.2.13, 4.2.18 & 4.2.19)	Jamaica, MONTEGO BAY, Sangster Intl	Tails of large aircraft parked on stands in front of terminal and obstacles north of the runway strip infringe on the transitional surfaces specified in Annex 14 Vol I Section 4.2.7	OCT/ 2000	ICAO Visit October 2000	A	Eliminate obstacles	Jamaica	DEC/ 2001	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AGA 33 CAR	Radio Aids (ANP, Table AOP 1)	Jamaica, KINGSTON, Norman Manley Intl	No ILS is provided on Runway 12 as required in the CAR/SAM ANP FASID	OCT/ 2000	ICAO Visit October 2000 IFALPA Meeting November 2000	A	Provide for precision approach procedures on Runway 12	Jamaica		
AGA 63 CAR	Fencing (Annex 14, Vol. I, Chap. 8.4)	Jamaica, MONTEGO BAY, Sangster Intl	No perimeter road is provided for airfield access and security patrols as recommended in Annex 14, Vol. I Section 8.4.5	DEC/ 2000	ICAO Visit October 2000	B	Provide a perimeter road	Jamaica		
AGA 70 CAR	Rescue and Fire Fighting Service and Airport Emergency Planning (Annex 14, Vol. I, Chap. 9.1 & 9.2, Rec. 9.2.30)	Jamaica, KINGSTON, Norman Manley Intl	No direct access is provided between the RFFS facility and the runway as specified in Annex 14, Vol. I Section 9.2.22 and 26)	OCT/ 2000	ICAO Visit October 2000	A	Provide direct access link	Jamaica		
JAM Jamaica										
AIS 14 CAR	Annex 15, Chap. 4, Para. 4.2.9; Doc. 8733, Basic ANP, Part VIII, Paras 36 to 37	Jamaica	Lack of regular and effective updating of the AIP Document	OCT/ 2000	GREPECAS AIS/MAP Subgroup	A	Need to keep updated the information/data contained in the AIP	State		
AIS 59 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Jamaica	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State	DEC/ 2009	Obstacles determination.
AIS 255 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Jamaica	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for effective production of this series of aeronautical charts.	State		
AIS 322 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Jamaica	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2008	
JAM Jamaica										
MET 4 CAR	SIGMET information (Annex 3, Part I, Chapter 7, standard 7.1.1)	Jamaica	Not all SIGMET messages are prepared based on the procedures established by ICAO	MAY/ 1996	Implement the COM/MET SIP recommendations for the CAR Region; and b) make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A	Ensure the correct elaboration of SIGMETs and their dissemination in accordance with the requirements of Table MET 2A.	State	APR/ 2003	TC, CB and VA shall be reported in SIGMET but TC and VA occasionally affect the Kingston FIR, TC advisories are issued by Miami TCRC and TC and CB cloud systems may be identified in satellite pictures.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
MET 20 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	Jamaica	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49	JUN/ 1996	Review the functions and training of the aeronautical meteorologist	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	States		
MET 39 CAR	Notify the RVR for CAT I operations (Annex 3, Part I, Chapter 4, Recommendation 4. 6.3.2)	Jamaica	RVR have not been implemented	JUN/ 1996	Plan the acquisition of the RVR	B	To ensure the implementation of required RVR.	State		
MET 54 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	Jamaica	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements.	States		
MET 73 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39	Jamaica	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B.	JUN/ 1996	a) Implement the COM/MET SIP Recommendations for the CAR Region; and b) Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	States		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
MEX Mexico										
AGA 145 CAR	Runway strips (Annex 14, Vol. I, Chap. 3.4 - 3.4.6)	Mexico, CANCUN, Cancun International	There is vegetation in the south portion all along the runway strip which are obstacles.	SEP/ 2001	ICAO Visit September 2001	A	To remove the vegetation.	Mexico		
AGA 146 CAR	Runway end safety area (Annex 14, Vol. I, Chap. 3.5 - 3.5.1 and 7)	Mexico, CANCUN, Cancun International	The runway end safety area on the west end of the runway is not graded.	SEP/ 2001	ICAO Visit September 2001	A	To grade the runway end safety area.	Mexico		
AGA 147 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.5.23 and ANP, Table AOP1)	Mexico, CANCUN, Cancun International	There is no approach lighting system on Runway 30.	SEP/ 2001	ICAO Visit September 2001	A	To provide a simple approach lighting system.	Mexico		
AGA 148 CAR	Runway end safety area (Annex 14, Vol.I, Chap. 3.5 - 3.3.1, 6 and 7)	Mexico, MONTERREY, Gral. Mariano Escobedo International	The runway end safety area on the south end of runway 16/34 has vegetation and it is not graded.	SEP/ 2001	ICAO Visit September 2001	A	To remove vegetation and to grade the runway end safety area.	Mexico		
AGA 149 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5- 5.3.5.23 and ANP, Table AOP1)	Mexico, MONTERREY, Gral. Mariano Escobedo International	Runway 16/34 has no visual approach slope indicator systems	SEP/ 2001	ICAO Visit September 2001	A	To provide visual approach slope indicator systems for Runway 16/34.	Mexico		
AGA 150 CAR	Rescue and Fire Fighting Service and Airport Emergency Planning (Annex 14, Vol. I, Chap. 9.1 & 9.2 - 9.2.3)	Mexico, MONTERREY, Gral. Mariano Escobedo International	The rescue and fire fighting category is defficient for ocasional operations of B747, An-124 and A330 and regular operations of B767.	SEP/ 2001	ICAO Visit September 2001	U	To elevate the RFFS category from 7 to 8	Mexico		
AGA 151 CAR	Pavement surface conditions (Annex 14, Vol. I, Chap. 10, 10.2.1 & 10.2.2)	Mexico, MONTERREY, Gral. Mariano Escobedo International	The apron and taxiway B surfaces need upgrading in some areas	SEP/ 2001	ICAO Visit September 2001	A	To upgrade the pavements in the taxiway and apron	Mexico		
AGA 152 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.2.3 and ANP, Table AOP1)	Mexico, MONTERREY, Gral. Mariano Escobedo International	The centreline marking on Runway 11/29 is defficient	SEP/ 2001	ICAO Visit September 2001	U	To repaint the runway centreline markings	Mexico		
AGA 154 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.5.2, 5.3.5.3 and ANP, Table AOP1)	Mexico, GUADALAJARA, Don Miguel Hidalgo y Costilla International	Runway 02/20 has no visual approach slope indicator systems	SEP/ 2001	ICAO Visit September 2001	A	To provide visual approach slope indicator systems for Runway 02/20.	Mexico		
AGA 155 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.16.5 and ANP, Table AOP1)	Mexico, GUADALAJARA, Don Miguel Hidalgo y Costilla International	The edge lights on a portion of taxiway A are installed more than 3 m from the edge of the taxiway.	SEP/ 2001	ICAO Visit September 2001	A	Relocate edge lights on the taxiway.	Mexico		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AGA 341 CAR	Runway Geometry (Annex 14, Vol. I, Chapter 3.1 - 3.1.18 and 19, 3.2.4, 3.3.14,Chap. 10, Rec. 10.1.1, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.4)	México, MÉXICO, Lic.Benito Juárez International Airport	The transversal slopes of the runways, shoulders and strips should ease to have a fas evacuation and to prevent the water accumulation on the surfaces. Sometimes runways are closed after it rains due to water saturation and innapropriate drainage.	OCT/ 2008	ICAO Visit - April 2003	A	Corrected	AICM (Mexico)	OCT/ 2008	
AGA 342 CAR	Runway Strip (Annex 14, Vol.I, Chap.3, 3.4, 3.4.2)	México, MÉXICO, Lic.Benito Juárez International Airport	The length of the Runway Strip 05L/23R is insufficient at both runway ends	OCT/ 2008	ICAO Visit - April 2003	A	To extend the strip or to reduce the declared distances of the runway. Action Plan: To attend this observation, the AICM is preparing proposals to be studied and approved by the DGAC, or that the DGAC prepares the corresponding recommendations and adopts the necessary measures in order to notify ICAO of the differences or to establish a Mexican Standard that endorses the difference as a State rule.	AICM (Mexico)		
AGA 343 CAR	Runway Strip (Annex 14, Vol.I, Chap.3, 3.4, 3.4.2 Rec.3.4.6)	México, MÉXICO, Lic.Benito Juárez International Airport	The width on the norhtern side of the Runway Strip 05L/23R is insufficient and contains objects, including a service road, taxiway B, the apron, the perimetral fence, buildings, public roads and elevated manholes.	APR/ 2003	ICAO Visit - April 2003	A	To broaden the runway strip and to eliminate objects, or reduce the category of the Runway 05L/23R to a visual runway (NINST) Action Plan: To attend this observation, the AICM is preparing proposals to be studied and approved by the DGAC, or that the DGAC prepares the corresponding recommendations and adopts the necessary measures in order to notify ICAO of the differences or to establish a Mexican Standard that endorses the difference as a State rule.	AICM (Mexico)		
AGA 344 CAR	Runway Strip (Annex 14, Vol.I, Chap.3.4, 3.4.7 Rec.3.4.6)	México, MÉXICO, Lic.Benito Juárez International Airport	The strip of Runway 05R/23L contains objects including drainage canals, elevated and uncovered manholes	APR/ 2003	ICAO Visit - April 2003	A	Eliminate the objects in the strip of Runway 05R/23L	AICM (Mexico)		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AGA 345 CAR	Runway End Safety Area (Annex 14, Vol.I, Chap. 3.5 & 3.5.1)	México, MÉXICO, Lic.Benito Juárez International Airport	The length and width of the runway end safety area of Runway 05L/23R is insufficient at both ends	APR/ 2003	ICAO Visit - April 2003	A	Corrected	AICM (Mexico)	DEC/ 2008	
AGA 346 CAR	Taxiways (Annex 14, Chap 3.9 - Rec. 3.9.8)	México, MÉXICO, Lic.Benito Juárez International Airport	The distance between the centrelines of Runway 05L/23R and the parallel taxiway is insufficient	APR/ 2003	ICAO Visit - April 2003	A	To provide the required distance for instrument runways or to reduce the category of Runway 05L/23R to a visual runway (NINST) Action Plan: To attend this observation, the AICM is preparing proposals to be studied and approved by the DGAC, or that the DGAC prepares the corresponding recommendations and adopts the necessary measures in order to notify ICAO of the differences or to establish a Mexican Standard that endorses the difference as a State rule.	AICM (Mexico)		
AGA 347 CAR	Taxiways (Annex 14, Chap 3, 3.9, Rec.3.9.8)	México, MÉXICO, Lic.Benito Juárez International Airport	The distance between the centreline of taxiway B and the service parallel road is insufficient	APR/ 2003	ICAO Visit - April 2003	A	To provide the required distance between the taxiway and the service parallel road - relocate the service road. Action Plan: To attend this observation, the AICM is preparing proposals to be studied and approved by the DGAC, or that the DGAC prepares the corresponding recommendations and adopts the necessary measures in order to notify ICAO of the differences or to establish a Mexican Standard that endorses the difference as a State rule.	AICM (Mexico)		
AGA 350 CAR	Visual Aids (Annex 14, Chap. 5.2 - Std. 5.2.8.1)	México, MÉXICO, Lic.Benito Juárez International Airport	There are no taxiway centreline markings on the runway crossing points and on the eastern holding bay of Runway 05L/23R where aircraft turn	APR/ 2003	ICAO Visit - April 2003	A	Paint the taxiway centreline markings on the runways	AICM (Mexico)		
AGA 351 CAR	Visual Aids (Annex 14, Chap. 5.2 - Std. 5.2.8.1)	México, MÉXICO, Lic.Benito Juárez International Airport	There are taxiway centreline markings that are no longer used and which have not been removed appropriately	APR/ 2003	ICAO Visit - April 2003	A	Remove the taxiway centreline markings that are no longer used	AICM (Mexico)		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AGA 352 CAR	Visual Aids (Annex 14, Chap. 5.2.1.4, 5.2.14.2)	México, MÉXICO, Lic.Benito Juárez International Airport	There are no security lines on the aprons	APR/ 2003	ICAO Visit - April 2003	A	Provide security lines on the aprons	AICM (Mexico)		
AGA 353 CAR	Visual Aids (Annex 14, Chap. 5.3 - Std. 5.3.4.1B and Doc 8733 ANP FASID Table AOP 1)	México, MÉXICO, Lic.Benito Juárez International Airport	Runway 05L does not have an approach lighting system	APR/ 2003	ICAO Visit - April 2003	A	To install a simple approach lighting system in Runway 05L	AICM (Mexico)	SEP/ 2005	
AGA 354 CAR	Visual Aids (Annex 14, Chap. 5.3 - Std. 5.3.4.1C and Doc 8733 ANP FASID Table AOP 1)	México, MÉXICO, Lic.Benito Juárez International Airport	Runways 05R and 23L have simple approach lighting systems	APR/ 2003	ICAO Visit - April 2003	A	Install Category I precision approach lighting systems in Runways 05R and 23L	AICM (Mexico)		
AGA 355 CAR	Visual Aids (Annex 14, Chap. 5.4.1, 5.4.1.1)	México, MÉXICO, Lic.Benito Juárez International Airport	There are not enough signs on the airfield	APR/ 2003	ICAO Visit - April 2003	A	Install the required signs on the airfield	AICM (Mexico)		
AGA 356 CAR	Visual Aids (Annex 14, Chap. 7.2 - Std. 7.2.1)	México, MÉXICO, Lic.Benito Juárez International Airport	Some taxiways have one line taxi side stripe markings on the edges	APR/ 2003	ICAO Visit - April 2003	A	Paint necessary markings with a couple of continuous yellow lines, including aprons, eastern edge holding bays where aircraft turn	AICM (Mexico)		
AGA 357 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap.9.2, Rec. 9.2.30)	México, MÉXICO, Lic.Benito Juárez International Airport	The rescue and fire fighting vehicles do not have direct access to both runways	APR/ 2003	ICAO Visit - April 2003	A	Extend the existing road between the station and taxiway B crossing Runway 05L/23R towards Runway 05R/23L	AICM (Mexico)		
AGA 361 CAR	Maintenance (Annex 14, Chap. 10, 10.4, 10.4.10)	México, MÉXICO, Lic.Benito Juárez International Airport	The approach lighting system of Runway 23R is reported to be out of service	APR/ 2003	ICAO Visit - April 2003	A	Repair the approach lighting system of Runway 23R	AICM (Mexico)		
MEX Mexico										
AIS 5 CAR	Annex 15, Chap. 4; Doc 8733 Basic ANP, Part VIII, Para. 33 Doc 8126	Mexico	Lack of Publication of the restructured AIP. The MAP section is still in use. Sections ENR and AD do not count with IFR/VFR charts.	APR/ 1996	GREPECAS AIS/MAP Subgroup Survey to States. No action plan is reported.	A	Need to produce and issue the new restructured AIP in accordance with the aforementioned requirements.	State		They are, gradually, transfering.
AIS 26 CAR	Annex 15, Chapter 3, Paras. 3.1.5 and 3.1.6; Chapter 5, Paras. 5.1.1.1 and Sec. 5.3	Mexico	Timely distribution of the information through NOTAM	OCT/ 2000	GREPECAS AIS/MAP Subgroup	A	Need to disseminate on time all operational information through NOTAM	State		
AIS 40 CAR	Annex 15, Para. 3.6.4; Annex 4, Para. 2.18; Doc. 8733, Basic ANP, Part VIII, Paras 50 to 58, FASID Table AIS 5	Mexico	Lack of implementation of the WGS-84	JAN/ 1998	GREPECAS AIS/MAP Subgroup Survey to States	A	Need to implement the WGS-84 Geodetic System	State		Obstacles determination.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AIS 60 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Mexico	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements. The Aeronautical Charts with the WGS-84 system requirements are being processed.	State	DEC/ 2006	Obstacles determination.
AIS 177 CAR	Annex 4Chap. 17.	Mexico	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the ICAO specifications. The production of VFR charts at 1:000.000 scale has begun.	State	DEC/ 2006	We are working with INEGI in the 1:500 000 charts production.
AIS 194 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Mexico	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. It is foreseen to notify ICAO a difference with regard to the use of the AIRAC System.	A	Need for production of aeronautical charts of this series according to the ICAO specifications. The restructuring of charts in accordance with ICAO requirements is under process.	State	DEC/ 2007	
AIS 210 CAR	Annex 4 Chap. 3; Doc. 8733 Basic ANP, Part VIII, Paras. 59 a) and 64 1); FASID Table AIS 6	Mexico	Partial application of ICAO requirements for the production of Aerodrome obstacle chart-ICAO Type A.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports.	A	Need for effective production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 265 CAR	Annex 4 Chap. 7; Doc 8733 Basic ANP, Part VIII, Paras. 59 d) and 64 4); FASID Table AIS 6	Mexico	Partial application of ICAO requirements for the production of En route Navigation Charts-ICAO.	SEP/ 1996	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Effective application of ICAO requirements for the production of ICAOs en-route navigation charts.	State	DEC/ 2007	
AIS 271 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 61 to 64, FASID Table AIS 7	Mexico	Lack of production of the World Aeronautical Chart ICAO 1:1000 000	NOV/ 1994	Records/files NACC RO; GREPECAS reports	B	Need of production of the World Aeronautical Chart ICAO 1:1000 000	State		
AIS 275 CAR	Doc. 8733 Basic ANP, Part VIII, Para.24	Mexico	Lack of use of English for plain language texts.	SEP/ 1996	Records/files NACC RO; GREPECAS reports. No action plan reported.	A	English language will be used for plain language texts.	SENEAM		
AIS 311 CAR	Annex 15, Chapter 4, Paras. 4.2.8 and 4.3.4., Chapter 6; Doc 8733 Basic ANP Part VIII, Paras. 45 to 49	Mexico	Lack of effective compliance with the AIRAC system requirement	NOV/ 1994	Records/files NACC RO	A	Need for an efficient application of AIRAC requirements in the integral package of aeronautical information.	State/Seneam	DEC/ 2007	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AIS 323 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	México	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective. A quality system (QS) will be implemented, as well as procedures for follow-up and quality control. The QA and QC procedures are being developed in the AIS/MAP services.		DEC/ 2007	
AIS 335 CAR	Annex 15 Chap. 8; Doc 8733 Basic ANP, Part VIII, para. 25; FASID Tables AIS 1 and 2	Mexico	Pre-flight information (implementation of required AIS aerodrome units)	SEP/ 1996	Records/files NACC RO. Flight information units have been established in 32 airports of the ANP which provide pre flight information and assessment in the formulation of the Flight Plan. No date has been set to count with this service in all the airports of the ANP due to budgetary constraints.	B		SENEAM		
AIS 337 CAR	Annex 15, Chap. 8, para 8.1.3; Doc 8733 Basic ANP, Part VIII, para. 2.6	Mexico	Pre-flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. This kind of bulletins is not foreseen in the short-term. There are budgetary constraints in the mid-term.	A		SENEAM		
AIS 338 CAR	Annex 15, paragraph 4.3.5	Mexico	In the checklist of the Amendment to the AIP, AD section, a series of aeronautical charts with changes are mentioned. These charts do not have any page designator indicating that they belong to the AD section.	DEC/ 2006	When an amendment to the AIP is published, a reference to the series number of the elements of the aeronautical information integrated documentation that has been incorporated to the amendment will be included.	A	Amend AD Section of the AIP/MEX to include the respective aeronautical charts.			
MEX Mexico										
CNS 54 CAR	VHF/AMS-voice. Aeronautical Mobile Service Plan (Table CNS 2A)	Mexico	Lack of VHF-AMS oral coverage under the FL280 in Houston oceanic FIR in the CTA Merida boundaries with the CTA Monterrey. This requirement does not figure in the Table CNS 2A of the FASID, which ICAO is coordinating with the United States.	JAN/ 2002	RO/ATM mission	A	To implement the required equipment for the operation of VHF/AMS oral functions. Implement a VHF remote stations in Mexico, based in a current agreement between Unites States and Mexico, as well as its mitigation by implementing ADS-B.	Mexico		Budget specific approval for this purpose.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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CNS 56 CAR	ATS speech circuits plan (Table CNS 1C) Belize APP - Merida ACC	Belize and Mexico	The circuit is out of service since 1 June 2003.	JUN/ 2003	Informed during the CA/ANE/WG/3 Meeting and reported by the DCA of Belize.	B	To implement a direct circuit to establish communications in 15 seconds. Action Plan: Mexico will send a proposal on this regard.	Mexico and Belize	DEC/ 2009	
MEX Mexico										
MET 40 CAR	CAR/SAM ANP MET Requirements, Table AOP 1.	Mexico	RVR have not been implemented.	JUN/ 1996		B	Toluca Airport (MMTO) has three RVR sensors, and it is expected to be operating at the end of 2005. Expected dates of RVR installation at MMMX, MMGL and MMMY airports: 6/2007	State	JUN/ 2007	Budgetary reasons had delayed the acquisition of these equipments.
MET 74 CAR	CAR/SAM ANP Requirements, Part VI, para. 8.	Mexico	There are deficiencies in the OPMET exchange.	JUN/ 1996	Review the OPMET exchange procedures, both in the meteorology and communications areas.	A	It is expected that at the end of 2005 the implementation of the template be continued in order to avoid mistakes in the MET report transmission.	States	APR/ 2006	Budgetary reasons had delayed the implementation of this programme-template.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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MSR Montserrat										
AIS 133 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Montserrat	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 152 CAR	Annex 4 Chap. 16 Append. 5. FASID Table AIS 7.	Montserrat	Production of the world aeronautical charts-ICAO not according to the sheet layout index established for this series of chart.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the established requirements.	State		
AIS 290 CAR	Annex 15 Chap. 8; Doc. 8733 Basic ANP, Part VIII, Para. 25; FASID Tables AIS 1 and 2	Montserrat	Pre- flight information (implementation of required AIS aerodrome units).	SEP/ 1996	Records/files NACC RO. No action plan reported.	B	Need for effective implementation of required AIS aerodrome units.	State		
AIS 301 CAR	Annex 4Chap. 17.	Montserrat	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the ICAO specifications.	State		
AIS 302 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Montserrat	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for effective production of this series of aeronautical charts.	State		
AIS 304 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Montserrat	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State		Obstacles determination.
AIS 329 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Montserrat	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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ANT Netherlands Antilles										
AGA 246 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.2.8.1 & 3)	Netherlands Antilles, CURACAO/ WILLEMSTAD, Hato Int'l	Taxiway centreline markings at runway – taxiway intersections are not provided on some taxiways	FEB/ 2002	ICAO Visit February 2002	A	Provide taxiway centreline markings at all runway – taxiway intersections. Action Plan: Airport operator to paint taxiway centreline markings on runway intersections.	Netherlands Antilles	APR/ 2003	
AGA 247 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.4.1(C) and ANP FASID Table AOP1)	Netherlands Antilles, CURACAO/ WILLEMSTAD, Hato Int'l	A simple approach lighting system is provided for Runway 11	FEB/ 2002	ICAO Visit February 2002	A	Provide a Category I precision approach lighting system for Runway 11. Action Plan: Airport operator to engage in consultation process with DCA and aircraft operators to confirm the need for a Category I precision approach lighting system and submit a technical aeronautical study to the DCA to request acceptance of non-compliance with standard requirement, if applicable. If a Category I precision approach lighting system is necessary, airport operator to provide.	Netherlands Antilles	DEC/ 2004	High cost of provision and pilot reports of blinding by existing lights.
AGA 248 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.4.1(C) and ANP FASID Table AOP1)	Netherlands Antilles, CURACAO/ WILLEMSTAD, Hato Int'l	A visual approach slope indicator system is not provided for Runway 29	FEB/ 2002	ICAO Visit February 2002	A	Provide a visual approach slope indicator system for Runway 29. Action Plan: Airport operator to engage in consultation process with DCA and aircraft operators to confirm the need for PAPI lights. If PAPI lights are necessary, airport operator to provide.	Netherlands Antilles	DEC/ 2004	High cost of provision and low utilisation of Runway 29 (<1%).

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AGA 249 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.15 - 5.3.15.1)	Netherlands Antilles, CURACAO/ WILLEMSTAD, Hato Int'l	Stopway lights are not provided	FEB/ 2002	ICAO Visit February 2002	A	Provide stopway lights or do not declare stopway. Action Plan: NOTAM to be issued by DCA notifying lack of stopway lights. Airport operator to engage in consultation process with DCA and aircraft operators to confirm the need for stopways. If stopways are not necessary, DCA not to declare, modify the runway declared ASDA distance and amend AIP. If stopways are necessary, airport operator to provide stopway lights.	Netherlands Antilles	DEC/ 2004	
AGA 250 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10.2, 10.2.1,10.2.2, 10.2.4, 10.2.7)	Netherlands Antilles, CURACAO/ WILLEMSTAD, Hato Int'l	Parallel taxiway pavement has extensive cracking from the apron to Runway 11	FEB/ 2002	ICAO Visit February 2002	A	Upgrade taxiway pavement. Action Plan: Airport operator developing a new re-aligned Taxiway A West.	Netherlands Antilles	DEC/ 2003	
AGA 251 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10.2, 10.2.1,10.2.2, 10.2.4 & 10.2.7)	Netherlands Antilles, CURACAO/ WILLEMSTAD, Hato Int'l	Runway pavement has extensive cracking	FEB/ 2002	ICAO Visit February 2002	A	Upgrade runway pavement. Action Plan: Airport operator to seal runway surface.	Netherlands Antilles	DEC/ 2003	Airport operator has carried out a specialized technical study, which establishes that the cracking is only superficial, not structural.
AGA 253 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - 3.4.4)	Netherlands Antilles, BONAIRE/ KRALENDIJK, Flamingo	The runway strip width is inadequate for an instrument runway	FEB/ 2002	ICAO Visit February 2002	A	Widen the runway strip	Netherlands Antilles		
AGA 254 CAR	Obstacles (Annex 14, Vol. I , Chap. 4 - 4.2.13, 4.2.18 - 4.2.19)	Netherlands Antilles, BONAIRE/ KRALENDIJK, Flamingo	Obstacles in the transitional surface include aircraft parked on the apron and buildings	FEB/ 2002	ICAO Visit February 2002	A	Remove the obstacles	Netherlands Antilles		
AGA 255 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.2.4.1)	Netherlands Antilles, BONAIRE/ KRALENDIJK, Flamingo	Apron safety line markings are not provided	FEB/ 2002	ICAO Visit February 2002	A	Provide apron safety line markings	Netherlands Antilles		
AGA 256 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.5.23 and ANP FASID Table AOP1)	Netherlands Antilles, BONAIRE/ KRALENDIJK, Flamingo	A visual approach slope indicator system is not provided for Runway 28	FEB/ 2002	ICAO Visit February 2002	A	Provide a visual approach slope indicator system for Runway 28	Netherlands Antilles		
AGA 257 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap. 9.1 & 2 - 9.1.1)	Netherlands Antilles, BONAIRE/ KRALENDIJK, Flamingo	The aerodrome emergency plan is not complete	FEB/ 2002	ICAO Visit February 2002	A	Complete the aerodrome emergency plan	Netherlands Antilles		
AGA 258 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.2.3)	Netherlands Antilles, BONAIRE/ KRALENDIJK, Flamingo	Runway centreline markings are fading	FEB/ 2002	ICAO Visit February 2002	A	Re-paint runway markings	Netherlands Antilles		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 259 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - 3.4.2)	Netherlands Antilles, SINT MAARTEN/ PHILIPSBURG, Princess Juliana Int'l	The runway strip length is insufficient at both runway ends.	FEB/ 2002	ICAO Visit February 2002	A	Provide the required runway strip length by not declaring the stopways at both runway ends. Action Plan: Strip extends up to 60 m beyond end of runway. This length is available by not declaring stopways. Has been investigated to establish the implications.	PJIAE (Netherlands Antilles)	DEC/ 2005	
AGA 260 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - 3.4.4)	Netherlands Antilles, SINT MAARTEN/ PHILIPSBURG, Princess Juliana Int'l	The runway strip width is inadequate for an instrument runway	FEB/ 2002	ICAO Visit February 2002	A	Widen the runway strip. Action Plan: Runway strip is adequate for visual approaches. An IFR may be cleared to execute a visual approach, provided the meteorological conditions are such that a visual approach and landing can be completed. For PJIA a strip of 2x75 is then sufficient. An IFR flight on visual approach is approved.	PJIAE (Netherlands Antilles)		
AGA 261 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 3.5 - 3.5.1)	Netherlands Antilles, SINT MAARTEN/ PHILIPSBURG, Princess Juliana Int'l	Runway end safety areas are not provided at both runway ends	FEB/ 2002	ICAO Visit February 2002	A	Provide the required runway end safety areas by not declaring the stopways at both runway ends. Action Plan: NACO has been commissioned and has worked out a plan of action to address this matter.	PJIAE (Netherlands Antilles)	DEC/ 2005	
AGA 263 CAR	Obstacles (Annex 14, Vol. I , Chap. 4, 4.2, Rec. 4.2.12)	Netherlands Antilles, SAINT MAARTEN/ PHILIPSBURG, Princess Juliana Int'l	Obstacles in the transitional surface include aircraft parked on the apron, buildings and vegetation	FEB/ 2002	ICAO Visit February 2002	A	Minimise the presence of obstacles by prevention and removal. Light and mark remaining obstacles as appropriate. Action Plan: Remedy hydrant system leakage. Local authorities have been advised of the required measures for implementation	PJIAE (Netherlands Antilles)		
AGA 264 CAR	Obstacles (Annex 14, Vol. I , Chap. 4, 4.2, Rec. 4.2.12)	Netherlands Antilles, SINT MAARTEN/ PHILIPSBURG, Princess Juliana Int'l	Obstacles infringing on the take off climb and approach obstacle limitation surfaces for both Runways 09 & 27 include fencing, vehicles on roads, buildings, vegetation and terrain.	FEB/ 2002	ICAO Visit February 2002	A	Eliminate some obstacles by not declaring the stopways at both runway ends. This may involve a displacement of the Runway 09 threshold and Runway 27 end. Remove, light and mark remaining obstacles as appropriate.	PJIAE (Netherlands Antilles)	DEC/ 2005	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AGA 268 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.4.1 (B) and ANP FASID Table AOP1)	Netherlands Antilles, SINT MAARTEN/ PHILIPSBURG, Princess Juliana Int'l	A simple approach lighting system is not provided for Runway 09	FEB/ 2002	ICAO Visit February 2002	A	Provide a simple approach lighting system for Runway 09	PJIAE (Netherlands Antilles)		Simple approach lighting system at Runway 09 is not practicable because of the sea. It is not required when the runway is used in conditions of good visibility or if other visual aids are provided. In this case we have good visibility and a PAPI system on the left and right side of the runway.
AGA 270 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.15, 5.3.15.1)	Netherlands Antilles, SINT MAARTEN/ PHILIPSBURG, Princess Juliana Int'l	Stopway lights are not provided at both runway ends	FEB/ 2002	ICAO Visit February 2002	A	Provide stopway lights or do not declare stopways at both runway ends. Action Plan: Stopways should not be declared, no lights required.	PJIAE (Netherlands Antilles)	DEC/ 2005	
ANT Netherlands Antilles										
AIS 41 CAR	Annex 15, Para. 3.6.4; Annex 4, Para. 2.18; Doc. 8733, Basic ANP, Part VIII, Paras 50 to 58, FASID Table AIS 5	Netherlands Antilles	Lack of implementation of the WGS-84	JAN/ 1998	GREPECAS AIS/MAP Subgroup Survey to States	A	Need to implement the WGS-84 Geodetic System	State	NOV/ 2004	Obstacles determination
AIS 61 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Netherlands Antilles	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO.	A	Need for production of aeronautical charts according to requirements.	State		Obstacles determination
AIS 79 CAR	Annex 15, Chapter 4, Paras. 4.2.8 and 4.3.4., Chapter 6; Doc 8733 Basic ANP Part VIII, Paras. 45 to 49	Netherlands Antilles	Lack of effective compliance with the AIRAC system requirement	NOV/ 1994	Records/files NACC RO; GREPECAS reports. No action plan reported.	A	Need for an effective application of AIRAC requirements	State		
AIS 104 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 9 to 12	Netherlands Antilles	Lack of highest priority for printing of AIS publications.	SEP/ 1996	Records/files NACC RO; GREPECAS reports	A	Need to provide a higher priority for the printing of AIS publications	State		
AIS 134 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Netherlands Antilles	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO;	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 195 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Netherlands Antilles	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports.	A	Need for production of aeronautical charts of this series according to the ICAO specifications.	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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AIS 211 CAR	Annex 4 Chap. 3; Doc. 8733 Basic ANP, Part VIII, Paras. 59 a) and 64 1); FASID Table AIS 6	Netherlands Antilles	Partial application of ICAO requirements for the production of Aerodrome obstacle chart-ICAO Type A.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports.	A	Need for effective production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 256 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Netherlands Antilles	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports.	A	Need for effective production of this series of aeronautical charts.	State		
AIS 266 CAR	Annex 4 Chap. 7; Doc 8733 Basic ANP, Part VIII, Paras. 59 d) and 64 4); FASID Table AIS 6	Netherlands Antilles	Partial application of ICAO requirements for the production of En route Navigation Charts-ICAO.	SEP/ 1996	Records/files in NACC RO. GREPECAS and AIS/MAP/SG reports.	A	Effective application of ICAO requirements for the production of En route chart-ICAO.	State		
AIS 268 CAR	Annex 15, Chapter 4, Para. 4.2.9; Doc. 8733, ANP, Part VI, 3.2	Netherlands Antilles	Lack of regular and effective updating of the AIP Document	OCT/ 2000	GREPECAS AIS/MAP Subgroup	A	Need to keep updated the information/data contained in the AIP	State		
AIS 330 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Netherlands Antilles	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	
ANT Netherlands Antilles										
CNS 23 CAR	Radio Navigation Aids (Table CNS 3) - VOR/DME ABA	Netherlands Antilles	DME in bad conditions, and the VOR and DME need to be replaced. VOR/DME ABA is installed in Aruba/Reina Beatrix Intl., but is the responsibility of Netherlands Antilles.	JUN/ 2000		A	VOR DME equipment need to be replaced. Action Plan: Netherlands Antilles has indicated that the VOR/DME ABA is in the process of being replaced.	Netherlands Antilles	DEC/ 2009	
CNS 27 CAR	Radio Navigation Aids (Table CNS 3) - ILS Cat. I	Netherlands Antilles/Philipsburg/Princess Juliana, St. Maarten I.	This ILS is not implemented.	FEB/ 1999	The facility was recommended for final approach and landing.	A	Netherlands Antilles plans to implement the ILS or GNSS Cat I system should be updated. Action Plan: GNSS procedures will be applied.	Netherlands Antilles		The ILS required for the St. Maarten airport could not be installed due to construction obstacles.
CNS 28 CAR	Radio Navigation Aids (Table CNS 3) - VOR/DME	Netherlands Antilles/Willemstad/Hato, Curacao	The VOR and the DME are implemented, but the VOR is disabled due to close construction.	FEB/ 1999	The facility was recommended for en-route, navigation, terminal area and approach and landing.	A	There are plans in the Netherlands Antilles to replace this facility by a new VOR/DME. Action Plan: Netherlands Antilles has indicated that the VOR/DME PJG is in the process of being replaced.	Netherlands Antilles	DEC/ 2009	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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CNS 51 CAR	ATS Speech Circuits Plan (Table CNS 1C) Curaçao ACC-Baranquilla ACC	Neetherland Antilles and Colombia	Due to a broken down the circuit was discontinued and the impossibility to replace the Curaçao terminal equipment. For this, the IDD is use.	MAR/ 2003	Informed in the C/CAR WG/3 Meeting	B	Implement in a short-term this circuit through a MEVA II and REDDIG interconnection Action Plan: With the MEVA II / REDDIG interconnection the implementation will be imminent.	Netherlands Antilles and Colombia	APR/ 2009	
ANT Netherlands Antilles										
MET 5 CAR	SIGMET information (Annex 3, Part I, Chapter 7, standard 7.1.1)	Netherlands Antilles	Not all SIGMET messages are prepared based on the procedures established by ICAO.	MAY/ 1996	a) Implement the COM/MET SIP recommendations for the CAR Region; and b) make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A	Ensure the correct elaboration of SIGMETs and their dissemination in accordance with the requirements of Table MET 2A.	State	APR/ 2003	TC, CB and VA shall be reported in SIGMET but TC and VA occasionally affect Curacao FIR, TC advisories are issued by Miami TCRC and, TC and CB cloud systems may be identified in satellite pictures.
MET 22 CAR	Adequate number of MET trained staff.	Netherlands Antilles	There are requirements of specialized meteorology personnel in the aeronautical meteorology field and of an increase of the number of aeronautical meteorologists.	JUN/ 1996	To use CAR/SAM technical cooperation regional projects for the training of aeronautical meteorology.	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	States		
MET 55 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	Netherlands Antilles	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies.	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance.	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements.	States		
MET 75 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Netherlands Antilles	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B.	JUN/ 1996	Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	States		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
NIC Nicaragua										
AGA 233 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4.6)	Nicaragua, MANAGUA, Intl Managua	The military helicopters parked on the runway strip are obstacles	MAR/ 2002	ICAO Visit March 2002 & July 2006	A	The Air Force removed helicopters parked in the runway strip, who where placed in zones where they do not represent an obstacle. The International Airports Operator will proceed to build three remote platforms for helicopter stand. To date, the CAA has approved the design and shortly construction works will begin.	Nicaragua	AUG/ 2008	
AGA 237 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5- 5.3.4.1, 5.3.5.23 and ANP FASID Table AOP1)	Nicaragua, MANAGUA, Intl Managua	The runway has no approach lighting systems	MAR/ 2002	ICAO Visit March 2002 and July 2006	A	Provide approach lighting systems. The International Airports Administration Company presented an expansion project including acquisition and installation of approach lighting system for Runway 09.	Nicaragua	2009	
AGA 399 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5.2.7, 5.2.7.3 6 & 5.2.7.5)	Nicaragua, MANAGUA, Intl Managua	Runway End 27 has a “bubbled” turnaround pad that lacks Continuation of the runway side strip marking and In-pavement runway edge lights [elevated runway side lights are located on side of ”bubbled” turnaround pad	JUL/ 2006	ICAO Visit July 2006	A	Mark runway edge and install in-pavement runway edge lights. The International Airports Administrator Company finalized singalling of runway edges. The installation of in-pavement runway edge ligths will be completed in 2009 as part of the runway expansion project.	Nicaragua	2009	
AGA 405 CAR	Runway Strip (Annex 14, Vol.I, Chap.3.4.3 & 3.4.6)	Nicaragua, MANAGUA, Intl Managua	The width of the runway strip on the north side is insufficient due to the location of parallel Taxiway A	JUL/ 2006	ICAO Visit July 2006	A	Implement an ATCT operational plan that addresses when Taxiway is restricted for specific aircraft on approach. Construct new extension of Taxiway A parallel to new Runway End 27 outside of the runway strip. The International Airports Administrator Company will request an exemption from compliance with regulations and will establish a procedure taking SMS into account.	Nicaragua		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 406 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3.2.4)	Nicaragua, MANAGUA, Intl Managua	Two large drop offs between the runway edge and adjoining runway shoulder exist next to the entrance of the service road across from the Taxiway A entrance to Runway End 09.	JUL/ 2006	ICAO Visit July 2006	A	Fill in the depressed runway shoulder areas on each side of the ramp to reduce the elevation differences. The International Airports Administrator Company as part of the runway expansion project envisages grading the runway shoulder areas.	Nicaragua	2009	
NIC Nicaragua										
AIS 88 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 61 to 64, FASID Table AIS 7	Nicaragua	Lack of production of the World Aeronautical Chart ICAO 1:1000 000	NOV/ 1994	Records/files NACC RO; GREPECAS reports. Not indicated in the Action Plan.	B	The CAA recognises the need for producing ICAO Global aeronautical Charts 1: 1000,000 and therefore, an agreement with INETER is on-going, in order to resolve this deficiency.	State	2010	Need for production of ICAO Aeronautical World Chart 1:1000,000
AIS 153 CAR	Annex 4 Chap. 16 Append. 5. FASID Table AIS 7.	Nicaragua	Production of the world aeronautical charts-ICAO not according to the sheet layout index established for this series of chart.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports.	B	The CAA recognises the need for producing ICAO aeronautical Charts and therefore, an agreement with INETER is on-going.	State	2010	Need for production of aeronautical charts according to the established requirements. Action Plan: The production of world aeronautical charts has not been done in Nicaragua.
AIS 178 CAR	Annex 4Chap. 17.	Nicaragua	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports.	B	Need for production of aeronautical charts according to the ICAO specifications. Action Plan: This kind of charts will be produced in accordance with ICAO specifications. The CAA recognises the need for producing ICAO VFR Charts at a 1: 500,000 scale, and therefore, an agreement with INETER is on-going..	State	DEC/ 2010	Obtaining PLTS software to develop national charts.
AIS 324 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Nicaragua	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Civi Aviation authority is in the process of implementing a quality system (QS), as well as procedures for quality assurance and control (QA and QC) in the AIS/MAP services.	State	DEC/ 2010	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.
NIC Nicaragua										

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
ATM 1 CAR	Provision of air traffic control service CAR/SAM/3 Rec. 5/33	Nicaragua	Some segments of ATS routes of the FIR do not count yet with ATS at the required levels.	SEP/ 1994	GREPECAS/4, Report IATA Conc. 4/10, Appendix 5	A	The INAC informed of an implementation strategy that could be completed in 2008. The International Airports Administrator company (EAAI) requested the CAA to install secondary surveillance radars at the A. C. Sandino International Aiprort and at the Bluefields aerodrome..	INAC Nicaragua	DEC/ 2008	
NIC Nicaragua										
MET 23 CAR	Adequate number of MET trained staff.	Nicaragua	There are requirements of specialized meteorology personnel in the aeronautical meteorology field and of an increase of the number of aeronautical meteorologists.	JUN/ 1996	To use CAR/SAM technical cooperation regional projects for the training of aeronautical meteorology.	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology. Action plan: There are ten aeronautical meteorologists duly trained by the OMM. This amount is due to the actual level of automation. The Aeronautical Authority developed an action plan in conjunction with the meteorological service provider, INETER, which envisages the inclusion of at least two meteorological specialists to be added to the current 10 aeronautical meteorologists who are duly trained by the WMO. This quantity is due to the automation level currently in place..	States	2009	
MET 41 CAR	CAR/SAM ANP MET Requirements, Table AOP 1.	Nicaragua	RVR have not been implemented.	JUN/ 1996		B	To ensure the implementation of required RVR. The Aeronautical Authority developed an action plan in collaboration with INETER for the procurement of an RVR.	State	2009	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
MET 76 CAR	CAR/SAM ANP Requirements, Part VI, para. 8.	Nicaragua	There are deficiencies in the OPMET exchange.	JUN/ 1996	Review the OPMET exchange procedures, both in the meteorology and communications areas.	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A. Action plan: The operating data exchange is given in a quick and dynamic way due to the new system of fiber optic that was installed in the last semester 2003.	States		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
KNA Saint Kitts and Nevis										
AGA 280 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - Std. 3.4.2)	St. Kitts and Nevis, BASSETERRE, Robert L. Bradshaw Int'l	Runway strip length at runway ends is insufficient	JAN/ 2003	ICAO Visit - January 2003	A	Extend runway strip or do not declare stopways and reduce runway declared distances	St. Kitts and Nevis		
AGA 281 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3, 3.4 - Rec. 3.4.4 & 6)	St. Kitts and Nevis, BASSETERRE, Robert L. Bradshaw Int'l	Runway strip width is insufficient and contains objects	JAN/ 2003	ICAO Visit - January 2003	A	Remove objects and widen strip where possible	St. Kitts and Nevis		
AGA 282 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 3, 3.5, 3.5.1 & 3.5.2)	St. Kitts and Nevis, BASSETERRE, Robert L. Bradshaw Int'l	Runway end safety areas are not provided	JAN/ 2003	ICAO Visit - January 2003	A	Provide runway end safety areas by extension of airfield or do not declare stopways and reduce runway declared distances	St. Kitts and Nevis		
AGA 283 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - Std. 5.4.1.1)	St. Kitts and Nevis, BASSETERRE, Robert L. Bradshaw Int'l	Airfield signs are not provided	JAN/ 2003	ICAO Visit - January 2003	A	Provide airfield signs	St. Kitts and Nevis		
AGA 284 CAR	Fencing (Annex 14, Vol. I, Chap. 9.10, 9.10.2, 9.10.4 & 9.10.6)	St. Kitts and Nevis, BASSETERRE, Robert L. Bradshaw Int'l	The perimeter fencing is inadequate	JAN/ 2003	ICAO Visit - January 2003	A	Upgrade perimeter barrier to prevent unauthorised access by people and entrance of animals	St. Kitts and Nevis		
AGA 285 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - Rec. 3.4.5 & 6)	St. Kitts and Nevis, CHARLESTOWN, Vance W. Amory Int'l	The runway strip width is insufficient and contains objects	JAN/ 2003	ICAO Visit January 2003	A	Remove objects and widen strip or reduce the aerodrome category. Action Plan: The strip width will be published as a Deficiency.	Nevis Island Administration	SEP/ 2003	
AGA 286 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 3.5 - Std. 3.5.2)	St. Kitts and Nevis, CHARLESTOWN, Vance W. Amory Int'l	The runway end safety area length at the east end is insufficient	JAN/ 2003	ICAO Visit January 2003	A	Extend the runway end safety area length, reduce the Runway 10 declared distances or reduce the aerodrome category. Action Plan: Runway upgrade project.	Nevis Island Administration	DEC/ 2006	
AGA 287 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - Std. 5.3.5.1 & Doc. 8733 ANP FASID Table AOP1)	St. Kitts and Nevis, CHARLESTOWN, Vance W. Amory Int'l	No visual approach slope indicator system is provided on Runway 28	JAN/ 2003	ICAO Visit January 2003	A	Provide visual approach slope indicator system on Runway 28. Action Plan: Provide PAPI for Runway 28.	NASPA (Saint Kitts and Nevis)	SEP/ 2005	
AGA 288 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.4, 5.4.1.1)	St. Kitts and Nevis, CHARLESTOWN, Vance W. Amory Int'l	Airfield signs are not provided	JAN/ 2003	ICAO Visit January 2003	A	Provide airfield signs	NASPA (Saint Kitts and Nevis)	SEP/ 2005	
AGA 289 CAR	Fencing (Annex 14, Vol. I, Chap.9, 9.10, 9.10.2, 9.10.4 & 9.10.6)	St. Kitts and Nevis, CHARLESTOWN, Vance W. Amory Int'l	The perimeter fencing is inadequate	JAN/ 2003	ICAO Visit January 2003	A	Upgrade perimeter barrier to prevent unauthorised access by people and entrance of animals	St. Kitts and Nevis		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
KNA Saint Kitts and Nevis										
AIS 63 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Saint Kitts and Nevis	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan is reported.	A	Need for production of aeronautical charts according to requirements. The CAA is negotiating a project with TCB.	State		
AIS 136 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Saint Kitts and Nevis	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan is reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes. The CAA is negotiating a project with TCB.	State		
AIS 154 CAR	Annex 4 Chap. 16 Append. 5. FASID Table AIS 7.	Saint Kitts and Nevis	Production of the world aeronautical charts-ICAO not according to the sheet layout index established for this series of chart.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the established requirements. The CAA is negotiating a project with TCB.	State		
AIS 179 CAR	Annex 4Chap. 17.	Saint Kitts and Nevis	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan es reported.	B	Need for production of aeronautical charts according to the ICAO specifications. The CAA is negotiating a project with TCB.	State		
AIS 197 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Saint Kitts and Nevis	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan es reported.	A	Need for production of aeronautical charts of this series according to the ICAO specifications. The CAA is negotiating a project with TCB.	State	JAN/ 2001	
AIS 257 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Saint Kitts and Nevis	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for effective production of this series of aeronautical charts. The CAA is negotiating a project with TCB.	State	JAN/ 2000	
AIS 333 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Saint Kitts and Nevis	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
LCA Saint Lucia										
AGA 109 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.4, 5.3.4.1 (A))	Saint Lucia, CASTRIES, George F. L. Charles Intl	No approach lighting systems are provided at both runway ends	JUL/ 2001	ICAO Visit July 2001	A	Reduce the aerodrome category to reference Code 2 and/or provide simple approach lighting systems at both runway ends. Action Plan: AD Category reduced to Code 2	SLASPA	AUG/ 2003	Installation of simple approach lighting system is not physically practicable.
AGA 110 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.4, 5.3.4.1 (A))	Saint Lucia, CASTRIES, George F. L. Charles Intl	No visual approach slope indicator system is provided on Runway 27	JUL/ 2001	ICAO Visit July 2001	A	Provide visual approach slope indicator system on Runway 27	SLASPA	AUG/ 2003	File Difference. No PAPI is provided for Runway 27.
AGA 111 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.2.3 & 5.3.2.5 & 3 and ANP FASID Table AOP1)	Saint Lucia, CASTRIES, George F. L. Charles Intl	APAPI is provided on Runway 09 instead of PAPI	JUL/ 2001	ICAO Visit July 2001	A	Reduce the aerodrome category to reference Code 2 and/or provide PAPI on Runway 09. Action Plan: Aerodrome reduced to Category Code 2.	Saint Lucia	AUG/ 2003	
AGA 112 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10.2, 10.2.1, 10.2.2. & 10.2.3)	Saint Lucia, CASTRIES, George F. L. Charles Intl	Runway pavement surface severely deficient in many areas and FOD is present	JUL/ 2001	ICAO Visit July 2001	A	Maintain runway surface clean of FOD and upgrade the runway pavement	Saint Lucia		
AGA 113 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3.1 & 3.2, 3.2.1)	Saint Lucia, VIEUX FORT, Hewanorra Intl	Runway shoulders are not provided	JUL/ 2001	ICAO Visit July 2001	B	Provide runway shoulders. Status: Ongoing	SLASPA		
AGA 118 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, Rec. 5.1.1.5)	Saint Lucia, VIEUX FORT, Hewanorra Intl	Wind direction indicator is not illuminated	JUL/ 2001	ICAO Visit July 2001	A	Provide illuminated wind indicator. Status: Pending	SLASPA	JUN/ 2003	
AGA 120 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.5.1 & 3 and ANP FASID Table AOP 1)	Saint Lucia, VIEUX FORT, Hewanorra Intl	Runway 28 PAPI is not operational due to lack of electrical power supply	JUL/ 2001	ICAO Visit July 2001	A	Provide PAPI for Runway 28. Status: Pending	SLASPA	OCT/ 2003	
AGA 122 CAR	Fencing (Annex 14, Vol. I, Chap. 9, 9.10, 9.10.9)	Saint Lucia, VIEUX FORT, Hewanorra Intl	No perimeter road is provided	JUL/ 2001	ICAO Visit July 2001	B	Provide perimeter road. Status: Pending	SLASPA	DEC/ 2004	
LCA Saint Lucia										
AIS 64 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Saint Lucia	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State		Obstacles determination.
AIS 116 CAR	Annex 15 Chap. 8; Doc. 8733 Basic ANP, Part VIII, Para. 25; FASID Tables AIS 1 and 2	Saint Kitts and Nevis	Pre- flight information/(implementation of required AIS aerodrome units).	SEP/ 1996	Records/files NACC RO. No action plan reported.	B	Need for effective implementation of required AIS aerodrome units. The CAA is negotiating a project with TCB.	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 137 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Saint Lucia	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 155 CAR	Annex 4 Chap. 16 Append. 5. FASID Table AIS 7.	Saint Lucia	Production of the world aeronautical charts-ICAO not according to the sheet layout index established for this series of chart.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the established requirements.	State		
AIS 180 CAR	Annex 4Chap. 17.	Saint Lucia	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	B	Need for production of aeronautical charts according to the ICAO specifications.	State		
AIS 198 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Saint Lucia	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 258 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Saint Lucia	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for effective production of this series of aeronautical charts.	State	JAN/ 2000	
AIS 325 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Saint Lucia	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	
LCA Saint Lucia										
MET 24 CAR	Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part I, Chapter 2, standard 2.1.5	Saint Lucia	Not all personnel complies with the requirements related to qualifications and training of WMO Publications N°. 49	JUN/ 1996	Review the functions and training of the aeronautical meteorologist	A	To make the best efforts to have the adequate number of personnel duly trained in aeronautical meteorology.	State		
MET 42 CAR	Notify the RVR for CAT I operations (Annex 3, Part I, Chapter 4, Recommendation 4. 6.3.2)	Saint Lucia	RVR have not been implemented	JUN/ 1996	Plan de acquisition of the RVR	B	To ensure the implementation of required RVR.	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
MET 56 CAR	Relay of air-reports by ATS units (Annex 3, Part I, Chapter 5, standard 5.8)	Saint Lucia	ATS dependencies do not transmit regularly all special AIREPs to MET dependencies	MAY/ 1996	Review the ATS/MET Letter of agreement and make a follow-up to ensure its compliance.	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements.	State		
MET 77 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 39)	Saint Lucia	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 3B.	JUN/ 1996	a) Implement the COM/MET SIP Recommendations for the CAR Region; and b) Make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions	A	Ensure that OPMET exchange is made in accordance with requirements of Tables MET 2 and MET 2A.	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
VCT Saint Vincent and the Grenadines										
AGA 203 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3.1 & 3.2 - 3.1.12 & 13)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	Runway longitudinal slope exceeds recommended limits	DEC/ 2001	ICAO Visit December 2001	B	Reduce the aerodrome category to reference Code 2. Action Plan: Difference will be filed with ICAO and published in AIP.	Min. NS, PS & AD St. Vincent and the Grenadines	JUN/ 2004	Runway longitudinal slopes cannot be adjusted due to physical constraints.
AGA 204 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - 3.4.2)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	No runway strip is provided at the east runway end	DEC/ 2001	ICAO Visit December 2001	A	Provide the runway strip by displacing the Runway 07 end and reducing the declared landing distance. Action Plan: Runway 07 end will be displaced to provide runway strip. Declared distances will be revised.	Min. NS, PS & AD St. Vincent and the Grenadines	JUN/ 2006	
AGA 205 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - 3.4.2)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	Runway strip width is insufficient on both sides	DEC/ 2001	ICAO Visit December 2001	A	Reduce the aerodrome category to reference Code 2. Action Plan: Difference will be filed with ICAO and published in AIP.	Min. NS, PS & AD St. Vincent and the Grenadines		Runway strip width cannot be adjusted due to physical constraints.
AGA 206 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 3.5 - 3.5.1)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	No runway end safety area is provided at the east runway end	DEC/ 2001	ICAO Visit December 2001	A	Provide a runway end safety area by displacing the Runway 07 end and reducing the declared landing distance. Action Plan: Runway end safety area will be established under Airport Improvement Project. New declared distances will be published.	Min. NS, PS & AD St. Vincent and the Grenadines	JUN/ 2006	
AGA 207 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 3.5, 3.5.1, 3.5.2 & 3.5.4)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	Length and width of the runway end safety area at the west runway end is insufficient	DEC/ 2001	ICAO Visit December 2001	A	Correct the runway end safety area deficiencies by displacing the Runway 25 end and reducing the declared take-off distance. Action Plan: Runway end safety area will be established at west runway end under the Airport Improvement Project.	Min. NS, PS & AD St. Vincent and the Grenadines	JUN/ 2006	
AGA 208 CAR	Obstacles (Annex 14, Vol. I , Chap. 4, 4.2 Rec. 4.2.12)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	Obstacles infringing on the transitional obstacle limitation surface include aircraft parked on the apron, fencing, roads, utility poles, terrain, buildings and vegetation	DEC/ 2001	ICAO Visit December 2001	A	Reduce the aerodrome category to reference Code 2 and identify, remove and/or mark/light remaining obstacles. Action Plan: Apron to be relocated and significant obstructions removed or marked under the Airport Improvement Project.	Min. NS, PS & AD St. Vincent and the Grenadines	JUN/ 2006	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
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AGA 209 CAR	Obstacles (Annex 14, Vol. I , Chap. 4, 4.2 , Rec. 4.2.27)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	Obstacles infringing on the Runway 07 take off climb obstacle limitation surface include fencing, roads, terrain, buildings and vegetation	DEC/ 2001	ICAO Visit December 2001	A	Discontinue Runway 07 take-off operations with immediate effect. Action Plan: Discontinuation of Runway 07 take offs except under special dispensation by licensing authority.	Min. NS, PS & AD St. Vincent and the Grenadines	DEC/ 2004	
AGA 210 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.2.10, 5.2.10.1 & 5.2.10.2)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	Runway holding position marking is not provided on the west taxiway and no apron taxiway centreline, aircraft stand and safety line markings are provided	DEC/ 2001	ICAO Visit December 2001	A	Provide runway holding position marking on west taxiway and apron markings. Action Plan: Corrective action being undertaken under the Airport Improvement Project.	Min. NS, PS & AD St. Vincent and the Grenadines	JUN/ 2006	
AGA 211 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.4, 5.3.4.1, 10.4.20 & 10.4.21)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	Runway 07 approach lighting system is out of service	DEC/ 2001	ICAO Visit December 2001	A	Reinstate Runway 07 simple approach lighting system. Action Plan: Corrective action being undertaken under the Airport Improvement Project.	Min. NS, PS & AD St. Vincent and the Grenadines	JUN/ 2006	
AGA 212 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.4.1.1)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	No airfield signs are provided	DEC/ 2001	ICAO Visit December 2001	A	Provide airfield signs Action Plan: Corrective action being undertaken under the Airport Improvement Project.	Min. NS, PS & AD St. Vincent and the Grenadines	JUN/ 2006	
AGA 213 CAR	Fencing (Annex 14, Vol. I, Chap.9, 9.10, 9.10.1 & 9.10.3)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	An unauthorised person was observed crossing the runway strip at the west runway end and chickens were observed in front of the rescue and fire-fighting facility	DEC/ 2001	ICAO Visit December 2001	A	Ensure perimeter barrier is secure to prevent access to the airfield by animals and unauthorised persons. Action Plan: Repair and replacement of security fences, and construction of a perimeter road along the fence.	Min. NS. PS & AD St. Vincent and the Grenadines	DEC/ 2005	
AGA 214 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap. 9.2 - 9.2.3, 5 & 6)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	Rescue and fire-fighting Category should be 7, minimum 6, for B727 operations	DEC/ 2001	ICAO Visit December 2001	A	Discontinue B727 operations or upgrade RFFS Category to 7, or 6 minimum. Action Plan: RFF Category to be upgraded in keeping with aircraft types using airport.	Min. NS, PS & AD St. Vincent and the Grenadines	JUN/ 2006	
AGA 215 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10.2, 10.2.1, 10.2.2, 10.2.3 & 10.2.4)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	Runway sides, taxiway and apron pavement surfaces severely deficient in many areas and FOD is present	DEC/ 2001	ICAO Visit December 2001	A	Maintain pavement surfaces clean of FOD and repair pavements. Action Plan: Repair and upgrading of pavement surfaces is a part of the ongoing Airport Improvement Project.	Min. NS, PS & AD St. Vincent and the Grenadines	JUN/ 2006	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 216 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.2.4 & 5.2.4.1)	St. Vincent and the Grenadines, KINGSTOWN, E. T. Joshua	Runway 07 designation and threshold markings are faded	DEC/ 2001	ICAO Visit December 2001	A	Re-paint runway markings. Action Plan: Corrective action being undertaken.	Min. NS, PS & AD St. Vincent and the Grenadines	JUN/ 2004	
AGA 217 CAR	Runway Geometry (Annex 14, Vol. I, Chap. 3.1 & 3.2 - Stolport Manual 3.2.5.3 & Annex 14 Vol. I para. 3.1.13)	St. Vincent and the Grenadines, MUSTIQUE, Mustique	Runway longitudinal slope exceeds 2 % at both runway ends	DEC/ 2001	ICAO Visit December 2001	B	Review runway declared distances to include only those portions of the runway where the slope does not exceed 2% and publish in the AIP	St. Vincent and the Grenadines		
AGA 218 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.3 - Stolport Manual 3.3.2.1 & 3.3.5)	St. Vincent and the Grenadines, MUSTIQUE, Mustique	Runway strip contains objects including drainage channels and concrete lighting support bases and Runway strip width is deficient in the southeast portion where the road, vegetation and fencing infringe on the runway strip and in the northeast portion where the terrain, vegetation and fencing infringe on the runway strip	DEC/ 2001	ICAO Visit December 2001	A	Cover drainage channels and delethalise lighting bases and widen the runway strip or reduce the runway declared distances	St. Vincent and the Grenadines		
AGA 219 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.3 - Stolport Manual 3.3.2.2)	St. Vincent and the Grenadines, MUSTIQUE, Mustique	Runway strip length at east runway end is insufficient	DEC/ 2001	ICAO Visit December 2001	A	Displace Runway 09 end and reduce the corresponding landing and take-off declared distances	St. Vincent and the Grenadines		
AGA 220 CAR	Obstacles (Annex 14, Vol. I , Chap. 4 - Stolport Manual 4.2)	St. Vincent and the Grenadines, MUSTIQUE, Mustique	Take-off obstacle limitation surface contains severe infringements by terrain and vegetation based on runway take-off declared distance published in AIP	DEC/ 2001	ICAO Visit December 2001	A	Reduce Runway 09 take-off declared distance to reflect displaced runway end for curved departure path and publish in the AIP	St. Vincent and the Grenadines		
AGA 221 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - Stolport Manual 5.3.1)	St. Vincent and the Grenadines, MUSTIQUE, Mustique	No stolport designation marking is provided at the Runway 09 threshold	DEC/ 2001	ICAO Visit December 2001	A	Provide stolport designation marking	St. Vincent and the Grenadines		
AGA 222 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap. 9.1 - Stolport Manual 9.1.1 & 2)	St. Vincent and the Grenadines, MUSTIQUE, Mustique	No stolport emergency plan exists	DEC/ 2001	ICAO Visit December 2001	A	Prepare a stolport emergency plan	St. Vincent and the Grenadines		
AGA 223 CAR	Rescue and Fire Fighting (Annex 14, Vol. I, Chap. 9.2 - Stolport Manual 9.2.2 and Annex 14 Vol. I para. 9.2.29 & 30)	St. Vincent and the Grenadines, MUSTIQUE, Mustique	The present position of the rescue and fire-fighting vehicle on the western edge of the apron is remote from personnel and does not have direct access to the runway and Security personnel double up as RFFS personnel	DEC/ 2001	ICAO Visit December 2001	A	Relocate position of RFFS vehicle to be close to personnel and have direct access to the runway and specify security procedures in the case of an emergency	St. Vincent and the Grenadines		

VCT Saint Vincent and the Grenadines

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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MET 79 CAR	Adequate number of MET trained staff.	Saint Vincent	There are requirements of specialized meteorology personnel in the aeronautical meteorology field and of an increase of the number of aeronautical meteorologists.	JUN/ 1996	To use CAR/SAM technical cooperation regional projects for the training of aeronautical meteorology.	A	Upgrade training to senior and junior members of staff and increase the number of personnel.	State		

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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TTO Trinidad and Tobago										
AGA 8 CAR	Taxiway Parallel to Runway (Annex 14, Vol. I, Chap. 3, Rec. 3.9.1 & 3.9.2 and ANP, Table AOP 1)	Trinidad and Tobago, PORT OF SPAIN, Piarco Intl	No full-length parallel taxiway	DEC/ 1999	ICAO Visits March & December 2001 IFALPA Meeting November 2000	B	Provide a full-length parallel taxiway. Action Plan: Extension of taxiway planned.	AATT/BWIA (Trinidad and Tobago)	DEC/ 2015	
AGA 20 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3, 3.4, 3.4.3)	Trinidad and Tobago, PORT OF SPAIN, Piarco Intl	Taxiways B and aircraft maintenance apron infringe on the runway strip	MAR/ 2001	ICAO Visits March & December 2001	A	Relocate parallel taxiways to the required separation distance from the runway. Action Plan: Taxiway B realignment planned. Relocation of apron planned.	AATT & AATT/BWIA (Trinidad and Tobago)	DEC/ 2015	
AGA 31 CAR	Obstacles (Annex 14, Vol. I, Chap. 4, 4.2, 4.2.13 & 4.2.21)	Trinidad and Tobago, PORT OF SPAIN, Piarco	Facilities located north of the western runway end are obstacles infringing in the transitional surface	MAR/ 2001	ICAO Visits March & December 2001	A	Relocate facilities. Action Plan: Relocation of hangars planned.	AATT / BWIA (Trinidad and Tobago)	DEC/ 2015	
AGA 34 CAR	Radio Aids (ANP, Table AOP 1)	Trinidad and Tobago, SCARBOROUGH, Crown Point	No ILS and VOR	DEC/ 1999	IFALPA Meeting November 2000 Verified by ICAO with reference to AIP	A	Implement the facility. Action Plan: Replacement and relocation of NDB and new LLZ/DME planned.	TTCAA (Trinidad and Tobago)	DEC/ 2005	
AGA 58 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 and ANP, Table AOP 1)	Trinidad and Tobago, PORT OF SPAIN, Piarco Intl	No taxiway signs are provided on taxiways B and C	MAR/ 2001	ICAO Visits March & December 2001	A	Install taxiway signs. Action Plan: New signs to be installed	AATT (Trinidad & Tobago)	JUN/ 2004	
AGA 71 CAR	Rescue and Fire Fighting Service and Airport Emergency Planning (Annex 14, Vol. I, Chap. 9.1 & 9.2)	Trinidad and Tobago, PORT OF SPAIN, Piarco	RFFS facilities are inadequate- Ref Annex 14 Vol. I Sections 9.2.21, 22, 29 & 30	MAR/ 2001	ICAO Visits March & December 2001	A	Provide new RFFS facility at a location with direct access to the runway and ensuring minimum response times to both runway ends. Action Plan: New RFFS facility under construction.	Trinidad & Tobago		
AGA 84 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.4 & 10.2.8)	Trinidad & Tobago, PORT OF SPAIN, Piarco Intl	Runway pavement surface condition deficient. Excessive rubber deposits on the runway surface	DEC/ 2000	IATA Report October 2000 ICAO Visits March & December 2001	A	Upgrade runway pavement. Action Plan: Rubber has been removed. Runway upgrading project ongoing.	AATT (Trinidad and Tobago)	SEP/ 2004	
AGA 290 CAR	Runway Strip (Annex 14, Vol. I, Chap. 3.4 - 3.4.2)	Trinidad and Tobago. SCARBOROUGH, Crown Point Int'l	The runway strip length is insufficient at the western runway end.	MAY/ 2002	ICAO Visit May 2002	A	Provide the required runway strip length. Action Plan: Publish lack of runway strip in AIP. Analyse operational impact of reducing runway declared distances.	TTCAA/AATT (Trinidad and Tobago)	MAR/ 2004	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 291 CAR	Runway End Safety Area (Annex 14, Vol. I, Chap. 3.5 - 3.5.1)	Trinidad and Tobago. SCARBOROUGH, Crown Point Int'l	No runway end safety area is provided at the western runway end	MAY/ 2002	ICAO Visit May 2002	A	Provide the required runway end safety area. Action Plan: Publish lack of RESA in AIP. Analyse operational impact of reducing runway declared distances.	TTCAA/AATT (Trinidad and Tobago)	MAR/ 2004	
AGA 293 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.3.5.1 & ANP FASID Table AOP1)	Trinidad and Tobago. SCARBOROUGH, Crown Point Int'l	Runway 29 is not provided with a visual approach slope indicator system	MAY/ 2002	ICAO Visit May 2002	A	Provide a visual approach slope indicator system on Runway 29. Action Plan: Installation of Runway 29 VASIS planned.	AATT (Trinidad and Tobago)	DEC/ 2005	
AGA 294 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5 - 5.4.1.1)	Trinidad and Tobago. SCARBOROUGH, Crown Point Int'l	No airfield signs are provided	MAY/ 2002	ICAO Visit May 2002	A	Provide airfield signs. Action Plan: Installation of airfield signs planned.	AATT (Trinidad and Tobago)	DEC/ 2005	
AGA 295 CAR	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 10, 10.2, & 10.2.1)	Trinidad and Tobago. SCARBOROUGH, Crown Point Int'l	Apron pavement surface has some irregularities and FOD along the slab joints	MAY/ 2002	ICAO Visit May 2002	A	Repair apron pavements. Action Plan: Apron pavement upgrading project planned.	AATT (Trinidad and Tobago)	JUN/ 2005	
TTO Trinidad and Tobago										
AIS 66 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Trinidad and Tobago	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. Not included in the Action Plan.	A	Need for production of aeronautical charts according to requirements. The following aeronautical charts have been produced according to WGS-84 requirements: Piarco Aerodrome Chart - ICAO, Piarco Aerodrome Obstacle Chart - ICAO - Type A, IAC RNAV RWY10, IAC RNAV RWY28, Piarco CTR Area Chart, Crown Point Aerodrome Chart - ICAO, Crown Point aerodrome Obstacle Chart, ICAO Type A, IAC RNAV RWY11, IAC RNAV TWY29.	State	2008	Obstacles determination.
AIS 157 CAR	Annex 4 Chap. 16 Append. 5. FASID Table AIS 7.	Trinidad and Tobago	Production of the world aeronautical charts-ICAO not according to the sheet layout index established for this series of chart.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. Not included in the Action Plan.	B	Need for production of aeronautical charts according to the established requirements. In consultation with charging agency for production of this chart, there exists discrepancies with ICAO sheet layout APP5 to Annex4, Ch. 16 and AIS FASID table 7 which need to be resolved.	State	DEC/ 2010	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AIS 182 CAR	Annex 4Chap. 17.	Trinidad and Tobago	Production of the VFR chart, scale 1:500,000-with non ICAO specifications.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports.	B	Need for production of aeronautical charts according to the ICAO specifications. Action plan: Requirement has been confirmed in consultation with charting agency for production of this chart.	State	DEC/ 2010	
AIS 200 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Trinidad and Tobago	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports.	A	Need for production of aeronautical charts of this series according to the ICAO specifications. Action plan: New IAC RNAV charts produced for Crown Point and Piarco. New IAC charts produced for Crown Point. Charts possess most ICAO requirements. Some work still to be done.	State	DEC/ 2010	
AIS 260 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Trinidad and Tobago	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. Not included in the Action Plan.	A	Need for effective production of this series of aeronautical charts.	State	MAY/ 2008	ICAO Aerodrome charts produced for Piarco and Crown Point.
AIS 291 CAR	Annex 15 Chap. 8; Doc. 8733 Basic ANP, Part VIII, Para. 25; FASID Tables AIS 1 and 2	Trinidad and Tobago	Pre- flight information (implementation of required AIS aerodrome units).	SEP/ 1996	Records/files NACC RO.	B	Need for effective implementation of required AIS aerodrome units. Action Plan: Procurement of equipment ongoing. Aerodrome AIS Unit established in Piarco, Preflight Information briefing available at Piarco AIS, AIS Aerodrome Unit not yet established at Crown Point. The need for this service to be researched.	State	DEC/ 2010	
AIS 297 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Trinidad and Tobago	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes. Action plan: Procurement of equipment ongoing.	State	DEC/ 2004	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AIS 326 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Trinidad and Tobago	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective. The ICAO Guidance Manual on Implementation of a Quality System in AIS received. The Quality Manual for Piarco AIS completed. Work still beng done on the Procedures Manual and Work Instructions.	State	DEC/ 2010	
TTO Trinidad and Tobago										
MET 43 CAR	CAR/SAM ANP MET Requirements, Table AOP 1.	Trinidad and Tobago	RVR have not been implemented.	JUN/ 1996		B	As stated in an earlier document, the Trinidad and Tobago Meteorological Service will not be installing Runway Visual Range equipment in Trinidad and Tobago, due to the low frequency of limiting visibility. The Civil Aviation Authority is advised that the "Supplement in respect of the provisions of Trinidad and Tobabo be amended"	State	JUN/ 2004	
MET 57 CAR	CAR/SAM ANP, Part VI, Meteorology, para. 3.	Trinidad and Tobago	Do not transmit regularly the special AIREPs in accordance with requirements.	MAY/ 1996	Keep a strict supervision and control of the operational ATS/MET staff to keep them informed on the importance of AIREPs and on the need to disseminate them where required.	A	Disseminate air notifications to required locations in accordance with the Table MET 2A requirements. Action plan: The Meteorological Service has not received an AIREP message during the past four (4) years at least from Civil Aviation. Therefore we are unable to transmit these messages.	State	APR/ 2003	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

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MET 78 CAR	CAR/SAM ANP Requirements, Part VI, para. 8.	Trinidad and Tobago	There are deficiencies in the OPMET exchange.	JUN/ 1996	Review the OPMET exchange procedures, both in the meteorology and communications areas.	A	The Trinidad and Tobago Meteorological Service transmits, via the AFTN, all observations and SIGMETs. TAFs are transmitted via the International Satellite Communications System (ISCS). However, there have been many occasions when observations reaches the addressees in the Eastern Caribbean only, because there is a problem in Atlanta of which we are not made aware. If all our transmissions are sent via the ISCS, CAA will not receive any transmissions from us because your are not on the ISCS.	State		
TTO Trinidad and Tobago										
SAR 2 CAR	Search and Rescue facilities CAR/SAM/3 Rec. 6/2	Trinidad and Tobago RCC Piarco	SAR partially implemented	OCT/ 1995	GREPECAS/5	A	Procurement of equipment ongoing for RCC. SAR services provided by Trinidad and Tobago navy.	CAA Trinidad and Tobago/Ministry of Nat.Sec.	DEC/ 2009	SAR Agreememts with SRRs and RCCs finished.

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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TCA Turks and Caicos										
AIS 28 CAR	Annex 15, Chapter 3, Paras. 3.1.5 and 3.1.6; Chapter 5, Paras. 5.1.1.1 and Sec. 5.3	Turks and Caicos Islands	Timely distribution of the information through NOTAM	OCT/ 2000	GREPECAS AIS/MAP Subgroup	A	Need to disseminate on time all operational information through NOTAM	State		
AIS 67 CAR	Annex 4, Para. 2.18; Doc. 8733 Basic ANP, Part VIII, Paras. 51 b) and 56	Turks and Caicos Islands	Production of aeronautical charts according to requirements of the WGS-84 System	JAN/ 1998	Records/files in NACC RO. No action plan reported.	A	Need for production of aeronautical charts according to requirements.	State		
AIS 80 CAR	Annex 15, Chapter 4, Paras. 4.2.8 and 4.3.4., Chapter 6; Doc 8733 Basic ANP Part VIII, Paras. 45 to 49	Turks and Caicos Islands	Lack of effective compliance with the AIRAC system requirement	NOV/ 1994	Records/files NACC RO; GREPECAS reports. No action plan reported.	A	Need for an effective application of AIRAC requirements	State		
AIS 90 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 61 to 64, FASID Table AIS 7	Turks and Caicos Islands	Lack of production of the World Aeronautical Chart ICAO 1:1000 000	JAN/ 1994	Records/files NACC RO; GREPECAS reports. No action plan reported.	B	Need for production of ICAO Aeronautical World Chart 1:1000,000	State		
AIS 105 CAR	Doc. 8733 Basic ANP, Part VIII, Paras. 9 to 12	Turks and Caicos Islands	Lack of highest priority for printing of AIS publications.	SEP/ 1996	Records/files NACC RO; GREPECAS reports	A	Need to provide a higher priority for the printing of AIS publications	State		
AIS 139 CAR	Annex 15. Chap. 8, Para. 8.1.3; Doc 8733 Basic ANP, Part VIII, Para. 26	Turks and Caicos Islands	Pre- flight information (provision of pre-flight bulletins in all the designated aerodromes).	SEP/ 1996	Records/files NACC RO. No action plan reported.	A	Need for effective implementation in the provision of pre-flight bulletins in all the designated aerodromes	State		
AIS 261 CAR	Annex 4 Chap. 13; Doc 8733 Basic ANP, Part VIII, Paras. 59 h) and 64 6); FASID Table AIS 6	Turks and Caicos Islands	Partial application of ICAO requirements for the production of Aerodrome/Heliport chart-ICAO.	JAN/ 1994	Records/files in NACC RO; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for effective production of this series of aeronautical charts.	State		
AIS 306 CAR	Annex 4Chap. 11; Doc. 8733 Basic ANP, Part VIII, Paras. 59 i) and 64 5); FASID Table AIS 6	Turks and Caicos Islands	Partial application of ICAO requirements for the production of Instrument approach charts.	JAN/ 1994	Records/files in NACC R0; GREPECAS and AIS/MAP/SG reports. No action plan reported.	A	Need for production of aeronautical charts of this series according to the ICAO specifications.	State		
AIS 331 CAR	Annex 15, Para. 3.2 Implementation of Quality System (QS) at the AIS.	Turks and Caicos	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP	DEC/ 2005	Must be included in the Action Plan.	A	Relevante technical documentation and rulles are being prepared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective.	State	DEC/ 2007	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
USA United States										
AGA 158 CAR	Visual Aids (Annex 14, Vol. I, Chap. 5, 5.3.5.3 and ANP, Table AOP1)	United States, San Juan, Luis Muñoz Marin International	Non-standard VASI is provided	APR/ 2002	ICAO Review of Aerodrome Layout & ICAO Visit - October 2003	A	Replace VASI with standard VASIS (i.e. PAPI). Action Plan: PAPI to be installed. Awaiting for administrative change. FAA ANI is awaiting for an NRA number for the project. Runway 08 currently has a PAPI installed. Runway 10/28 currently under construction will have PAPIs on both runway ends when it opens. Runway 26 VASI to be replaced with scheduled safety area/twy extension project.	United States		Runway 10/28 work expected to be complete Dec. 2007. Runway 26 safety area/twy extension to start following opening of Rwy 10/28 (expected to begin Jan 2008).
AGA 322 CAR	Runway Strip (Annex 14, Vol.I, Chap.3, 3.4 & 3.4.3)	United States, Puerto Rico, Luis Muñoz Marin International Airport	Runway strip widths are insufficient and contain objects including vegetation and arresting gear	OCT/ 2003	ICAO Visit - October 2003	A	Widen the runway strips and remove objects Action Plan: Corrections underway. Land areas beyond and to the sides of Rwy 8 are under development to provide RESA and runway strip. For Rwy 26 end, construction of the new full-parallel Twy S and land extension will provide a full width. The north side of Rwy 26 is bounded by a protected water/mangroves. Minimal arresting gear components currently sit inside the runway 26 safety area. Those items will be removed as part of the runway 26 safety area/twy extension project. Runway 10/28 work (estimated completion Dec. 2007) included removal of existing arresting gear components.	United States		Runway 26 safety area/twy extension to start following opening of Rwy 10/28 (expected to begin Jan 2008).

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CAR REGION

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 323 CAR	Runway End Safety Area (Annex 14, Vol.I, Chap. 3, 3.5, 3.5.1 & 3.5.2)	United States, Puerto Rico, Luis Muñoz Marin International Airport	No runway end safety area is provided at the east end of Runway 08/26	OCT/ 2003	ICAO Visit - October 2003	A	Provide runway end safety area by extension and/or displacing the Runway 08 end and Runway 26 threshold and reduce the runway declared distances accordingly. Action Plan: Threshold displaced to coincident with new parallel Twy S (underway) and relocated ILS. SJU working with FAA, US EPA and US Army Corps of Engineers to obtain a FONSI to continue extension of RESA. Planned project will provide extended safety area to include safety area work, displacement of 26 threshold, and application of declared distance declarations.	United States	2010	Construction projects have been implemented to rectify this urgent deficiency.
AGA 328 CAR	Visual Aids (Annex 14, Vol.I, Chap. 5.3.4, 5.3.4.2 & 5.3.4.3 and Doc. 8733 ANP FASID Table AOP1)	United States, Puerto Rico, Luis Muñoz Marin International Airport	The visual approach slope indicator systems provided for all runways are not compliant with standards	OCT/ 2003	ICAO Visit - October 2003	A	Replace the visual approach slope indicator systems with systems which are compliant with standards Action Plan: PAPI to be installed. Awaiting for administrative change. FAA ANI is awaiting for an NRA number for the project. Runway 08 currently has a PAPI installed. Runway 10/28 currently under construction will have PAPIs on both runway ends when it opens. Runway 26 VASI to be replaced with scheduled safety area/twy extension project.	United States		Runway 10/28 work expected to be complete Dec. 2007. Runway 26 safety area/twy extension to start following opening of Rwy 10/28 (expected to begin Jan. 2008).

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
ARG Argentina										
AGA 20 SAM	Visual aids (Annex 14, Vol. I, Ch. 5)	Argentina, BUENOS AIRES/Ezeiza Aerodrome	Lack of edge illumination in taxiway H and insufficient letter signs for information	NOV/ 2000	IATA/Letter sent to the President of ORSNA in November 2000 Fax 286/02 dated 30 OCT 2002 from Argentina	A	To provide edge illumination in taxiway H and to improve the letter signs for information. ACTION TAKEN: The Administration is preparing a Corrective Action Plan. A requirement was formulated trough the Regulatory Agency (ORSNA) to the Concesionaire in order to present a Corrective Action Plan "PENDING ACTION PLAN" ACTION PLAN: Included in the rehabilitation work of all the taxiways (AGA/AOP/SG/4 Meeting, Mexico, 15-18 NOV 04)	Argentina	MAR/ 2005	
AGA 142 SAM	Physical characteristics (Doc 8733, Vol. II, FASID)	Argentina/BUENOS AYRES/Ezeiza Aerodrome	RWY 11/29 length is 3300 m. The Regional ANP recommends 3700 m	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Inform the SAM Office when the remaining 400 m will be constructed "PENDING ACTION PLAN" COMMENTS: Information from Argentina indicates that the revised Master Plan considers rwy length of 3300 m, which is adequate for the operation of in service aircraft (AGA/AOP/SG/4, Mexico, 15-18 NOV 04 requested Argentina to solicit the SAM Office to prepare Amendment to ANP)	Argentina		
AGA 144 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/BUENOS AYRES/San Fernando Aerodrome	No PAPIs in RWYs 05 y 23, as recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide PAPIs for RWYs 05 y 23 and/or inform the SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Included in the Airport Construction Plan for JUN 2006 (AGA/AOP/SG/4, Mexico, 15-18 NOV 04)	Argentina	JUN/ 2006	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 145 SAM	Rescue and Fire Fighting Service (Annex 14, Vol. I, Ch. 9.2 and Doc 8733, Vol. II, FASID)	Argentina/CATARATAS DEL IGUAZU/My. Carlos Eduardo Krause Aerodrome	RFF is currently Category 6. The Regional ANP requires Category 9	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	A	Upgrade the RFF to Category 9, as recommended by the Regional ANP and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Included in the Airport Construction Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 04)	Argentina	DEC/ 2005	
AGA 146 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/CATARATAS DEL IGUAZU/My. Carlos Eduardo Krause Aerodrome	No PAPIs in RWYs 13 and 31, as recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Install PAPIs for RWYs 13 and 31 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Included in the Airport Construction Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 04)	Argentina	DEC/ 2005	
AGA 148 SAM	RFF (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/COMODORO RIVADAVIA/General Moscón Aerodrome	RFF is currently Category 6. The Regional ANP requires Category 7	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide category 7, as it is recommended by the Regional ANP and/or inform the ICAO SAM Regional Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled to be implemented in DEC 2006 (AGA/AOP/SG/4, Mexico, 15-18 NOV 04)	Argentina	DEC/ 2005	
AGA 150 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/COMODORO RIVADAVIA/General Moscón Aerodrome	No precision approach Category I lighting system at RWY 25, as recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide precision approach Category I lighting system at RWY 25 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: It is scheduled in the Airport Construction Plan for DEC 2007 (AGA/AOP/SG/4, Mexico, 15-18 NOV 04)	Argentina	DEC/ 2007	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 153 SAM	Physical characteristics (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 3.8)	Argentina/CORDOBA/Ing. Aer. Taravella Aerodrome	There is no TWY parallel to RWY 18, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Construct a parallel TWY to RWY 18 and/or inform to the ICAO SAM Office when it will be built "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Construction Plan for DEC 2006 (AGA/AOP/SG/4, Mexico, 15-18 NOV 04)	Argentina	DEC/ 2006	
AGA 154 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/CORDOBA/Ing. Aer. Taravella Aerodrome	There is no PAPI at RWY 18, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Install PAPI at RWY 18 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled to be done in DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 04)	Argentina	DEC/ 2005	
AGA 160 SAM	RFF (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 9.2)	Argentina/JUJUY/Gobernador Guzmán Aerodrome	The RFF is currently Category 4. The Regional ANP requires Category 7	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide RFF category 7 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: CAT 6, nowadays. It will be CAT 7 in DEC 2006 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2006	
AGA 162 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/JUJUY/Gobernador Guzmán Aerodrome	No PAPI at RWY 15, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Install PAPI at RWY 15 and/or inform to ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Construction Plan for DEC 2006 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2006	
AGA 164 SAM	RFF (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 9.2)	Argentina/MAR DEL PLATA/Gral. B. Colina Aerodrome	The RFF is currently Category 6. The Regional ANP recommends Category 7	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provid RFF category 7 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Construction Plan for DEC 2005/2006 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2006	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 165 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/MAR DEL PLATA/Gral. B. Colina Aerodrome	No precision approach Category I lighting system at RWY 13, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provid precision approach Category I lighting system at RWY 13 and/or inform the ICAO SAM office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Construction Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2005	
AGA 167 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/MENDOZA/El Plumerillo Aerodrome	No simple approach lighting system at RWY 18, as recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide simple approach lighting system at RWY 18 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Construction Plan for DEC 2006 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2006	
AGA 168 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/MENDOZA/El Plumerillo Aerodrome	No precision approach Category I lighting system at RWY 36, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provid precision approach Category lighting system at RWY 36 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Construction Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2005	
AGA 170 SAM	RFF (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 9.2)	Argentina/NEUQUEN/Presidente Perón Aerodrome	The RFF currently is Category 4. The Regional ANP requires Category 7	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide RFF Category 7and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Nowadays, CAT 6. Scheduled CAT 7 in the Airport Equipment Plan for DEC 2006 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2006	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 171 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/NEUQUEN/Presidente Perón	No precision approach Category I lighting system at RWY 08, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide precision approach Category I lighting system at RWY 08 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Construction Plan for DEC 2006 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2006	
AGA 179 SAM	RFF (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 9.2)	Argentina/RESISTENCIA/Resistencia Aerodrome	The RFF is currently Category 5. The Regional ANP recommends Category 9	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide RFF Category 9 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Nowadays, CAT 7. Scheduled CAT 9 in the Airport Equipment Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2005	
AGA 180 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/RESISTENCIA/Resistencia Aerodrome	No PAPIs at RWYs 03 and 21, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Install PAPIs at RWYs 03 and 21 and inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: RWY 21 scheduled in the Airport Equipment Plan for DEC 2005. RWY 03, Argentina will solicit its elimination from the ANP (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2005	
AGA 181 SAM	Physical characteristics (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 3.8	Argentina/RESISTENCIA/Resistencia Aerodrome	No Parallel TWY to RWY 21, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Construct parallel TWY to RWY 21 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" COMMENTS: Argentina will require to eliminate this requirement from the ANP (AGA/AOP/SG/4, Mexico, 15-18 NOV 04)	Argentina		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 182 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/RESISTENCIA/Resistencia Aerodrome	No precision approach Category I lighting system at RWY 21, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide precision approach Category I lighting sistem at RWY 21 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Construction Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2005	
AGA 184 SAM	RFF (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 9.2)	Argentina/RÍO GALLEGOS/Piloto Civil N. Fernández Aerodrome	The RFFis currently Category 7. The Regional ANP recommends Category 9	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide RFF Category 9 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Equipments Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2005	
AGA 187 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/RÍO GALLEGOS/Piloto Civil N. Fernández Aerodrome	No precision approach Category I lighting system at RWY 25, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide precision approach Category I lighting system at RWY 25 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Under verification. Scheduled for DEC 2004 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2004	
AGA 196 SAM	RFF (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 9.2)	Argentina/ROSARIO/Rosario Aerodrome	The RFF is currently Category 6. The Regional ANP recommends Category 9	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide RFF Category 9 and/or inform the ICAO SAM office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Equipments Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2005	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 199 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/ROSARIO/Rosario Aerodrome	No precision approach Category I lighting system at RWY 19, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide precision approach Category I lighting system at RWY 19 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Construction Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2005	
AGA 201 SAM	RFF (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 9.2)	Argentina/SALTA/Salta Aerodrome	The RFF is currently Category 4. The Regional ANP recommends Category 7	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide RFF Category 7 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Nowadays, CAT 6. Scheduled CAT 7 in the Airport Equipment Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2005	
AGA 202 SAM	Physical characteristics (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 3.8)	Argentina/SALTA/Salta Aerodrome	No parallel TWY to RWY 01, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Construct parallel TWY to RWY 01 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Construction Plan for DEC 2007 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2007	
AGA 208 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/SAN CARLOS DE BARILOCHE/San Carlos de Bariloche Aerodrome	No PAPI at RWY 11, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Install PAPI at RWY 11 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled in the Airport Construction Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2005	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 209 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/SAN CARLOS DE BARILOCHE/San Carlos de Bariloche Aerodrome	No precision approach Category I ighting system at RWY 11, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide precision approach Category I lighting system for RWY 11 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Scheduled for RWY 29 in the Airport Construction Plan for DEC 2005 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2005	
AGA 216 SAM	Visual aids (Doc 8733, Vol. II, FASID and Annex 14, Vol. I, Ch. 5)	Argentina/USHUAIA/Malvinas Argentinas Aerodrome	No precision approach Category I lighting system at RWY 25, as it is recommended by the Regional ANP	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide precision approach Category I lighting system at RWY 25 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN"	Argentina		
AGA 221 SAM	RFF (Annex 14, Vol. I, Ch. 9.2)	Argentina/BUENOS AYRES/Ezeiza/Min. Pistarini Int´l Airport	The fire station is not well located in relation to both RWYs. The response time obtained during the last exercise was 2´45´´	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Relocate fire station in order to reduce the response time to less than 2 min, in order to comply with the ICAO Recommendation 9.2.22 of Annex 14, Vol. I "PENDING ACTION PLAN" ACTION PLAN: Scheduled the construction of a satelite RFF for DEC 2006 (AGA/AOP/SG/4, Mexico, 15-18 NOV 2004)	Argentina	DEC/ 2006	
BOL Bolivia										
AGA 36 SAM	Rescue and Fire Fighting Service (Annex 14, Vol. I, Chap. 9)	Bolivia, LA PAZ/El Alto	Three minutes RFF time of response	SEP/ 2001	Detected during mission conducted by ICAO Secretariat Planned for June 2003, fax NAV/AER/702/02 from Bolivia	B	Improve RFF time of response to 2 minutes. ACTION PLAN: It was required to the company Rural Metro to cut down the response time to 2 min during the following tests to be carried out (Doc DGAC-0-1-1050, NA 328/AGA 095/04, 14 JUN 2004)	Bolivia/SABSA	JUL/ 2004	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 37 SAM	Obstacles (Annex 14, Vol. I Chap. 4 and Chap.6)	Bolivia, LA PAZ/El Alto	Church towers/buildings without obstacles lighting system	SEP/ 2001	Detected during mission conducted by ICAO Secretariat Planned para March 2003, fax NAV/AER/702/02 from Bolivia	A	Install lighting system on church towers/buildingss. ACTION TAKEN: DGAC has presented these requirements to the City Hall of El Alto in order to install the obstacle lighting system.	Bolivia/SABSA	MAR/ 2003	
AGA 278 SAM	Regional ANP (Doc 8733, FASID CAR/SAM-AOP)	BOLIVIA/SLCB - COCHABAMBA/Jorge Wilserman	There is no precision approach lighting system for RWY 32	MAR/ 2004	ICAO Regular Mission (12/13 AUG 2003 - Recommended Action AGA/04 of its respective Report)	A	Instal precision approach lighting system for RWY 32 "PENDING ACTION PLAN" ACTION PLAN: SABSA will install facility in DEC 2004 (Doc DGAC-0-1-1145/NA370/AGA101/04-30JUN2004). SABSA contracted the Tec. Coop. from ICAO. The company THALES was hired and it will be implemented in July 2005 (DGAC-0-1-2013, NA 594/AGA 165/04, 06 OCT 2004)	DGAC/SABSA	JUL/ 2005	
BRA Brasil										
AGA 137 SAM	Visual aids (Annex 14, Vol. I, Chap. 3, 9, Doc 9737 Part 8, Doc 9476, Doc 9157)	Brasil, SAO PAULO/Guarulhos	Apron congested for the type of aircraft proposed	MAY/ 2002	IFALPA Annex 19 Part 3 19-3-SAM-1	B	Adequate/manage apron for accommodate number of aircraft "PENDING ACTION PLAN" ACTION PLAN: Terminals expansion is underway. The positions will be gradually open until NOV 2005. Expansion of the apron/RWYs/TWYs to be started in DEC 2004 with duration of 30 months (Letter 767/CERNAI-ANA, dated 31 AUG 2004, Of. No. 121/SIE/11975/ DAC, dated 24 AUG 2004 and OF No. 9616/DO-DOGP/2004/INFRAERO, dated 04 AUG 2004	INFRAERO/Brazil	JUN/ 2007	
AGA 470 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Campo Grande Int´l	ANP requires RFF CAT 8. It is CAT 7	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/01 of its respective Report)	A	Upgrade RFF to CAT 8	BRAZIL/ANAC/INFRAERO		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AGA 471 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Corumbá Int´l	There is no PAPI for RWY 09	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/02 of its respective Report)	B	Install PAPI for RWY 09	BRAZIL/ANAC/INFRAERO		
AGA 472 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Afonso Pena Int´l	ANP requires PA3 type for RWY 15. It PA2	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/03 of its respective Report)	B	Upgrade Pista 15 to PA3	BRAZIL/ANAC/INFRAERO		
AGA 473 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Afonso Pena Int´l	There is no simple approach lighting system for RWY 33	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/04 of its respective Report)	B	Install simple approach lighting system for RWY 33	BRAZIL/ANAC/INFRAERO		
AGA 474 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Pinto Martins Int´l	There is no precision approach lighting system for RWY 13	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/05 of its respective Report)	B	Install precision approach lighting system for RWY 13	BRAZIL/ANAC/INFRAERO		
AGA 475 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Augusto Severo Int´l	There is no precision approach lighting system for RWY 16L	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/06 of its respective Report)	B	Install precision approach lighting system for RWY 16L	BRAZIL/ANAC/INFRAERO		
AGA 477 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Guararapes Int´l	There is no precision approach lighting system for RWY 18	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/08 of its respective Report)	B	Install precision approach lighting system for RWY 18	BRAZIL/ANAC/INFRAERO		
AGA 478 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Rio de Janeiro Int´l	There is no runway centre line lighting for RWY 15 as required by the ANP	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/09 of its respective Report)	B	Install runway centre line lighting for RWY 15 or request amendment to the ANP	BRAZIL/ANAC/INFRAERO		
AGA 479 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Rio de Janeiro Int´l	There is no runway touchdown zone lighting for RWY 15 as required by the ANP	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/10 of its respective Report)	B	Install runway touchdown zone lighting for RWY 15 or request amendment to the ANP	BRAZIL/ANAC/INFRAERO		
AGA 480 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Rio de Janeiro Int´l	There is no taxiway centre line lighting for RWY 15 as required the ANP	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/11 of its respective Report)	B	Install taxiway centre line lighting for RWY 15 or request amendment to the ANP	BRAZIL/ANAC/INFRAERO		
AGA 481 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Rio de Janeiro Int´l	There is no stop bars to RWY 15 as required by the ANP	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/12 of its respective Report)	B	Install stop bars to RWY 15 or request amendment to the ANP	BRAZIL/ANAC/INFRAERO		
AGA 482 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Deputado Luis Eduardo Magalhaes Int´l	There is no precision approach lighting system for RWY 10	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/13 of its respective Report)	B	Install precision approach lighting system for RWY 10	BRAZIL/ANAC/INFRAERO		
AGA 483 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Santarém Int´l	There is no TWY for RWY 10 as required by the ANP	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/14 of its respective Report)	B	Construct TWY for RWY 10	BRAZIL/ANAC/INFRAERO		

OUTSTANDING DEFICIENCIES

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

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AGA 484 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Santarém Int´l	There is no precision approach lighting system for RWY 10	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/15 of its respective Report)	B	Install precision approach lighting system for RWY 10	BRAZIL/ANAC/INFRAERO		
AGA 485 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Santarém Int´l	There is no taxiway edge lighting for RWY 10	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/16 of its respective Report)	B	Install taxiway edge lighting for RWY 10	BRAZIL/ANAC/INFRAERO		
AGA 486 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Santarém Int´l	There is no TWY centre line marking for RWY 10	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/17 of its respective Report)	B	Paint TWY centre line marking for RWY 10	BRAZIL/ANAC/INFRAERO		
AGA 487 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Santarém Int´l	There is no TWY holding position marking for RWY 10	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/18 of its respective Report)	B	Paint TWY holding position marking for RWY 10	BRAZIL/ANAC/INFRAERO		
AGA 488 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Santarém Int´l	There is no PAPI for RWY 28	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/19 of its respective Report)	B	Install PAPI for RWY 28	BRAZIL/ANAC/INFRAERO		
AGA 489 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Marechal Cunha Machado Int´l	ANP requires RFF CAT 8. It is CAT 7	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/20 of its respective Report)	B	Update RFF to CAT 8	BRAZIL/ANAC/INFRAERO		
AGA 490 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Marechal Cunha Machado Int´l	There is no precision approach lighting system for RWY 06	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/21 of its respective Report)	B	Install precision approach lighting system for RWY 06	BRAZIL/ANAC/INFRAERO		
AGA 491 SAM	Doc 8733, FASID CAR/SAM – AOP	BRAZIL/ANAC/INFRAERO/Marechal Cunha Machado Int´l	There is no PAPI for RWY 24	AUG/ 2006	ICAO regular mission (01-03 AUG/06, Recommended Action AGA/22 of its respective Report)	B	Install PAPI for RWY 24	BRAZIL/ANAC/INFRAERO		
CHL Chile										
AGA 229 SAM	Surface characteristics/Friction (Annex 14, Vol. I, Ch. 2, 3, and 9, Doc 9137-AN/898, Parts 2, 8 and 9)	Chile/SANTIAGO/Arturo Merino Benítez Int´l Airport	Excess of rubber at RWY surface and pavement is great process of deterioration	DEC/ 2002	Detected during mission conducted by ICAO Secretariat	B	Remove excess of ruber from RWY surface. The water pressure applications must be adjusted to the pavament´s deterioration condition in order not to intensify it "ACTION PLAN": Removal of RWY rubber built-up will be done in July 2003 (DGAC Letter, 17 JUN 2003). Rubber removed in SEP 2003. The RWY will receive an AC overlay in 2005, after the construction of the new RWY (Doc No. 04/3/605/2863, 15 JUN 2004).	Chile	JUL/ 2005	

OUTSTANDING DEFICIENCIES

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COL Colombia										
AGA 39 SAM	RWY strip (Annex 14, Vol. I, Chap. 3)	Colombia, RIO NEGRO/Jose Maria Cordoba Airport	There is available area for RWY strip at 18 end, but not levelled	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	B	Level (construct) runway strip at 18 end "PENDING ACTION PLAN"	Colombia		
AGA 40 SAM	RWY strip (Annex 14, Vol. I, Chap. 3)	Colombia, RIO NEGRO/Jose Maria Cordoba Airport	RWY strip 90 m wide in the direction of the TDZ of 36 end	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	B	Enlarge RWY strip at TDZ of 36 end "PENDING ACTION PLAN"	Colombia		
AGA 41 SAM	RWY strip (Annex 14, Vol. I, Chap. 3)	Colombia, RIO NEGRO/Jose Maria Cordoba Airport	Presence of a trapezoidal elevation (base of 15 m x 3 m and 0.6 m high) of the natural terrain in the direction of the TDZ of the 36 end at the RWY strip	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	B	Remove the natural terrain elevation "PENDING ACTION PLAN"	Colombia		
AGA 42 SAM	RWY end safety area (Annex 14, Vol. I, Chap. 3)	Colombia, RIO NEGRO/Jose Maria Cordoba Airport	There is available area for RESA at 18 end, but not levelled	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	B	Level the RESA area at 18 end or reduce declared distances "PENDING ACTION PLAN"	Colombia		
AGA 43 SAM	RWY end safety area (Annex 14, Vol. I, Chap. 3)	Colombia, RIO NEGRO/Jose Maria Cordoba Airport	There is no available area for stopway, strip and RESA at 36 end	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	A	Reduce declared distances "PENDING ACTION PLAN"	Colombia		
AGA 44 SAM	RVR (Doc 8733, Vol. II, FASID)	Colombia, RIO NEGRO/Jose Maria Cordoba Airport	RVR at both RWY ends are out of service	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	A	Fix thr RVRs at both RWY ends "PENDING ACTION PLAN" ACTION PLAN: In process of acquisition through ICAO (Doc 1003-003H4, 26 JAN 2004, UAEAC, Colombia) Contract underway (Doc 1010-P-291-05, 22 APR 2004, UEAC, Colombia) - to be finished in June 2005	Colombia	JUN/ 2005	
AGA 45 SAM	Obstacles (Annex 14, Vol. I, Chap. 4)	Colombia, RIO NEGRO/Jose Maria Cordoba Airport	RVR at TDZ of 18 end is not frangible. There is a rigid concrete base (0.6 m high)	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	B	Install a frangible structure for the RVR at TDZ of 18 end "PENDING ACTION PLAN" ACTION PLAN: In process of acquisition through ICAO (Doc 1003-003H4, 26 JAN 2004, UAEAC, Colombia) Contract underway (Doc 1010-P-291-05, 22 APR 2004, UEAC, Colombia) - to be finished in June 2005	Colombia	JUN/ 2005	

OUTSTANDING DEFICIENCIES

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

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AGA 47 SAM	RWY strip (Annex 14, Vol. I, Chap. 3)	Colombia, SANTAFE DE BOGOTA/Eldorado Airport	Strip not levelled near touch down zone of 13R end (South RWY)	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	B	Level the runway strip near the touch down zone of 13R end "PENDING ACTION PLAN" ACTION PLAN: Scheduled for MAR 2005 (AEROCIVIL 2002-1272, 23 NOV 2004)	Colombia	MAR/ 2005	
AGA 48 SAM	RWY end safety area (Annex 14, Vol. I, Chap. 3)	Colombia, SANTAFE DE BOGOTA/Eldorado Airport	There is available area for RESA, but not levelled (South RWY)	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	B	Level the RESA area "PENDING ACTION PLAN"	Colombia		
AGA 49 SAM	RWY end safety area (Annex 14, Vol. I, Chap. 3)	Colombia, SANTAFE DE BOGOTA/Eldorado Airport	There is no RESA at 13L end (North RWY). The natural terrain presents many irregularities	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	B	Construct RESA at 13L end (North RWY). Level the natural terrain "PENDING ACTION PLAN"	Colombia		
AGA 50 SAM	Obstacles (Annex 14, Vol. I, Chap. 4)	Colombia, SANTAFE DE BOGOTA/Eldorado Airport	RVR at TDZ of 13R end is not frangible (South RWY). There is a rigid concrete base (0.6 m high)	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	B	Install a frangible structure for the RVR at TDZ of 13R end "PENDING ACTION PLAN" ACTION PLAN: The structure of the RVR in RWY 13R will be changed (Doc 1003-003H4, 26 JAN 2004, UAEAC, Colombia)	Colombia	NOV/ 2004	
AGA 53 SAM	Obstacles (Annex 14, Vol. I, Chap. 4)	Colombia, SANTAFE DE BOGOTA/Eldorado Airport	RVR at TDZ of 13L end is not frangible (North RWY). There is a rigid concrete base (0.3 m high)	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	B	Install a frangible structure for the RVR at TDZ of 13L end "PENDING ACTION PLAN" ACTION PLAN: The structure of the RVR in RWY 13L will be changed (Doc 1003-003H4, 26 JAN 2004, UAEAC, Colombia)	Colombia	NOV/ 2004	
AGA 58 SAM	Stopway zone (Annex 14, Vol. I, Chap. 9)	Colombia, SANTAFE DE BOGOTA/Eldorado Airport	No paved stopway zone at 31R end (North RWY)	JUL/ 2001	Detected during mission conducted by ICAO Secretariat	B	Construct stopway zone "PENDING ACTION PLAN"	Colombia		
AGA 109 SAM	RWY surface conditions (Annex 14, Vol. I, Chap. 3)	Colombia, RIO NEGRO/José María Cordova	Undulated TDZ of RWY 36	MAY/ 2002	IFALPA Annex 19 Part 3 19-3-SAM-1	A	Eliminate excess of undulation at TDZ of RWY 36 "PENDING ACTION PLAN"	Colombia		
AGA 112 SAM	RWY strip (Annex 14, Vol. I, Chap. 3)	Colombia, LETICIA/Alfredo Vasquez Cobo	Very uneven RWY strip with garbage and weed grown	MAY/ 2002	IFALPA Annex 19 Part 3 19-3-SAM-1	B	Clean and level the RWY strip. Remove the weeds "PENDING ACTION PLAN"	Colombia		

OUTSTANDING DEFICIENCIES

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

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AGA 123 SAM	Rescue and Fire Fighting Service and airport emergency plan (Annex 14, Vol. I, Chap. 9)	Colombia, SAN ANDRES/Sesquicentenario	No emergency rescue boat available	MAY/ 2002	IFALPA Annex 19 Part 3 19-3-SAM-1	A	Provide rescue boat "PENDING ACTION PLAN" ACTION PLAN: There are 2 rescue boats. There is a proposal to remotorize the boats (Doc 1003-003H4, 26 JAN 2004, UAEAC, Colombia)	Colombia	AUG/ 2005	
AGA 124 SAM	Rescue and Fire Fighting Service and airport emergency plan (Annex 14, Vol. I, Chap. 9)	Colombia, SAN ANDRES/Sesquicentenario	Inadequate location of airport fire station	MAY/ 2002	IFALPA Annex 19 Part 3 19-3-SAM-1	B	Reallocate airport fire station "PENDING ACTION PLAN" ACTION PLAN: A new fire station will be constructed near the TWR. The design and budget are ready (Doc 1003-003H4, 26 JAN 2004, UAEAC, Colombia)	Colombia	DEC/ 2004	
AGA 287 SAM	Regional ANP (Doc 8733, FASID CAR/SAM - AOP)	COLOMBIA/CARTAGENA/Rafael Nuñez	There is no TWY for End 36	MAY/ 2003	ICAO Regular Mission (15/16 MAY 2003, Recommended Action (AGA/03 of its respective Report)	B	Construct TWY for End 36 "PENDING ACTION PLAN"	COLOMBIA/ AEROCIVIL		
AGA 289 SAM	Regional ANP (Doc 8733, FASID CAR/SAM - AOP)	COLOMBIA/LETICIA/ Alfredo Vásquez Cobo	RWY 02/20 is only 1880 m long	MAY/ 2003	ICAO Regular Mission (15/16 MAY 2003, Recommended Action AGA/05 of its respective Report)	B	Expand RWY 02/20 to 2400 m as it is recommende by the ANP "PENDING ACTION PLAN"	COLOMBIA/ AEROCIVIL		
AGA 294 SAM	Airport Services (Annex 14, Vol. I, Ch. 9 & Doc 9137-AN/898, Parts 8 & 9)	COLOMBIA/AEROCIVIL	The int´l airport inspections are carried out once a day	MAY/ 2003	ICAO Regular Mission (15/16 MAY 2003, Recommended Action AGA/10 of its respective Report)	B	Comply with the minimum recommendations for int´l airport daily inspections "PENDING ACTION PLAN"	COLOMBIA/ AEROCIVIL		
AGA 295 SAM	Airport Services (Annex 14, Vol. I, Ch. 9)	COLOMBIA/SANTAFÉ DE BOGOTÁ/Eldorado	Accumulated water in the drainage system (bird attraction) due to the accumulation of soil and vegetation	MAY/ 2003	ICAO Regular Mission (15/16 MAY 2003, Recommended Action AGA/13 of its respective Report)	B	Continuously, maintain and clean the drainage system "PENDING ACTION PLAN"	COLOMBIA/ AEROCIVIL		
AGA 296 SAM	Airport Services (Annex 14, Vol. I, Ch. 9)	COLOMBIA/SANTAFÉ DE BOGOTÁ/Eldorado	Very large pavement depression observed at, approximately, 120 m from the RWY 13R threshold	MAY/ 2003	ICAO Regular Mission (15/16 MAY 2003, Recommended Action AGA/14 of its respective Report)	A	Develop studies for evaluating the extension of the depression and its amplitud. Identify causes of the depression and possible solutions. Correct the problem "PENDING ACTION PLAN" ACTION PLAN: It will be corrected from 01-27 MAR 2005 (AEROCIVIL 2002-1272, 23 NOV 2004)	COLOMBIA/ AEROCIVIL	MAR/ 2005	

OUTSTANDING DEFICIENCIES

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

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AGA 297 SAM	RWY Strip (Annex 14, Vol. I, Ch. 3)	COLOMBIA/SANTAFÉ DE BOGOTÁ/Eldorado	Big Depression near End 13L and other small depressions on RWY strip	MAY/ 2003	ICAO Regular Mission (15/16 MAY 2003, Recommended Action AGA/15 of its respective Report)	B	Level all the RWY strip areas "PENDING ACTION PLAN"	COLOMBIA/ AEROCIVIL		
AGA 298 SAM	RWY Strip/Equipment and Installations (Annex 14, Vol. I, Chs. 3 & 8)	COLOMBIA/SANTAFÉ DE BOGOTÁ/Eldorado	There are concrete boxes for cables and rigid bases for PAPIs, approximately 20 cm above the ground level.	MAY/ 2003	ICAO Regular Mission (15/16 MAY 2003, Recommended Action AGA/16 of its respective Report	A	Correct these problems in order to have the concrete boxes for cables and the rigid bases for PAPIs at the ground level "PENDING ACTION PLAN"	COLOMBIA/ AEROCIVIL		
AGA 299 SAM	Emergency Plans (Annex 14, Vol. I, Ch. 8 & Doc 9137-AN/898, Part 7)	COLOMBIA/SANTAFÉ DE BOGOTÁ/Eldorado	The Emergency Operations Centre is not well located. It does not allow a clear view of the movement area and isolated aircraft parking position. Several people in the room can start the phone calls in case of emergency	MAY/ 2003	ICAO Regular Mission (15/16 MAY 2003, Recommended Action AGA/18 of its respective Report)	B	Clearly define who is in charge to trigger the phone calls in the Emergency Operations Centre. A room should be prepared for the COE and only the person on duty, responsible for triggering the phone calls should stay there. The phone number should be big and fixed in front of the operator. A good location should be provided for the COE in order to comply with the ICAO documents requirements "PENDING ACTION PLAN"	COLOMBIA/ AEROCIVIL		
AGA 300 SAM	Obstacles (Annex 14, Vol. I, Ch. 4)	COLOMBIA/SANTAFÉ DE BOGOTÁ/Eldorado	There are trees at, approximately, 30 m from the RWY strip edge	MAY/ 2003	ICAO Regular Mission (15/16 MAY 2003, Recommended Action AGA/19 of its respective Report)	B	Require the monitoring and control of the heights of these trees in order to avoid their interference on the inner transitional surface (If necessary, they must be cut and kept at adequate height) "PENDING ACTION PLAN"	COLOMBIA/ AEROCIVIL		
AGA 449 SAM	Annex 14, Vol. I, Ch. 5	COLOMBIA/AEROCIVIL/BOGOTA/El Dorado Int´l Airport	Apron horizontal signaling is faded	OCT/ 2005	ICAO regular mission (28-30/SEP/2005, Recommended Action AGA/02 of its respective Report)	A	Repaint apron horizontal signaling	AEROCIVIL/ BOGOTA/El Dorado Int´l Airport	2006	
AGA 450 SAM	Annex 14, Vol. I, Ch. 5	COLOMBIA/AEROCIVIL/BOGOTA/El Dorado Int´l Airport	Señalización vertical de las plataformas/pistas/calles de rodaje necesita ser corregida/ actualizada	OCT/ 2005	ICAO regular mission (28-30/SEP/2005, Recommended Action AGA/03 of its respective Report)	A	Update/Complement/ Install vertical signs in aprons/ taxiways/runways	AEROCIVIL/ BOGOTA/El Dorado Int´l Airport	JUL/ 2006	

OUTSTANDING DEFICIENCIES

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

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AGA 451 SAM	Annex 14, Vol. I, Ch. 3, Parag. 3.2.4	COLOMBIA/AEROCIVIL/BOGOTA/El Dorado Int´l Airport	Unevenness between taxiways/runways with shoulders	OCT/ 2005	ICAO regular mission (28-30/SEP/2005, Recommended Action AGA/04 of its respective Report)	A	Eliminate unevenness between taxiways /runways and shoulders	AEROCIVIL/ BOGOTA/El Dorado Int´l Airport	2006	
AGA 452 SAM	Annex 14, Vol. I, Ch. 3, Par. 3.4.3	COLOMBIA/AEROCIVIL/BOGOTA/El Dorado Int´l Airport	Grass in the runway strips is cut only in the first 75 m from the runway centerline	OCT/ 2005	ICAO regular mission (28-30/SEP/2005, Recommended Action AGA/05 of its respective Report)	B	Cut the grass in the entire runway strip (150 m at each side of the runway centerline)	AEROCIVIL/ BOGOTA/El Dorado Int´l Airport	2006	
AGA 453 SAM	Annex 14, Vol. I, Ch. 9	COLOMBIA/AEROCIVIL/BOGOTA/El Dorado Int´l Airport	Internal access road need maintenance and construction/ reconstruction in some parts	OCT/ 2005	ICAO regular mission (28-30/SEP/2005, Recommended Action AGA/06 of its respective Report)	A	Maintain and construct/ reconstruct internal access road	AEROCIVIL/ BOGOTA/El Dorado Int´l Airport	2006	
AGA 457 SAM	Annex 14, Vol. I, Ch. 4	COLOMBIA/AEROCIVIL/BOGOTA/El Dorado Int´l Airport	Trees entering the takeoff/ landing approach surfaces	OCT/ 2005	ICAO regular mission (28-30/SEP/2005, Recommended Action AGA/10 of its respective Report)	A	Cut trees	AEROCIVIL/ BOGOTA/El Dorado Int´l Airport	MAR/ 2006	
AGA 458 SAM	Annex 14, Vol. I, Ch. 3	COLOMBIA/AEROCIVIL/BOGOTA/El Dorado Int´l Airport	Rubber built up in excess at touchdown zone of end 13R of RWY 13R/31L	OCT/ 2005	ICAO regular mission (28-30/SEP/2005, Recommended Action AGA/11 of its respective Report)	A	Measure friction coefficient and remove excess of rubber buit up ACTION PLAN: Submited to concessionaire (Doc 1010-P-1113.05, 19 Dec 05)	AEROCIVIL/ BOGOTA/El Dorado Int´l Airport		
ECU Ecuador										
AGA 126 SAM	RWY surface conditions (Annex 14, Vol. I, Chap. 3)	Ecuador, QUITO/Mariscal Sucre	RWY poor braking action	MAY/ 2002	IFALPA Annex 19 Part 3 19-3-SAM-1	A	Evaluate the causes of poor brake action/Eliminate the cause "PENDING ACTION PLAN"	Ecuador		
AGA 305 SAM	Bird Strike (Annex 14, Vol. I, Ch. 9, Enmienda 5)	ECUADOR/DAC	There is no National Bird Strike Committee	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/04 of its respective Report)	A	Create and implement the National Bird Strike Prevention Committee and the Airport Coordinate Committees "PENDING ACTION PLAN" ACTION PLAN: Quito Airport has Airport Coordinating Committee. The National Committee will be implemented in 2006 (Doc DGAC-k3-O-05-1237, 05 DEC 2005).	ECUADOR/DAC	2006	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AGA 307 SAM	Regional ANP (Doc 8733, FASID CAR/SAM - AOP)	ECUADOR/GUAYAQUIL/Simón Bolívar	There is no precision approach lighting system, Category I for RWY 21	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/06 of its respective Report)	B	Install the precision approach lighting system, Category I for RWY 21 "PENDING ACTION PLAN" ACTION PLAN: There is an operation transition from Guayaquil Foundation and the new concessionaire, TAGSA. DGAC will require the system installation for further aerodrome certification (Doc DGAC-j-025-04, 25 JUN 2004). Airport started studies to construct a tunel at Benjamin Rosales Ave., which crosses near End 2; the RWY will be extended and visual aids will be implemented in 2007-2008 (Doc DGAC-k3-O-05-1237, 05 DEC 2005).	ECUADOR/DAC		
AGA 310 SAM	Visual Aids (Annex 14, Vol. I, Ch. 5 & Doc 8733, FASID CAR/SAM - AOP)	ECUADOR/LATACUNGA/Cotopaxi	There is no PAPI for RWY 36, as indicates the Regional ANP	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/09 of its respective Report)	B	Install the PAPI for RWY 36 "PENDING ACTION PLAN" ACTION PLAN: DGAC will carry out studies and project for implementing the PAPI system in 2004 (Doc DGAC-j-025-04, 25 JUN 2004).	ECUADOR/DAC	2004	
AGA 312 SAM	Master Planning (Doc 9184-AN/902, Part 1)	ECUADOR/DAC/Manta	Manta Int´l Airport does not have updated Master Plan	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/12 of its respective Report)	B	Develop/Update Manta Int´l Airport Master Plan "PENDING ACTION PLAN"	ECUADOR/DAC		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AGA 317 SAM	TWY Strip/shoulders(Annex 14, Vol. I, Ch. 3 & Doc 9157-AN/901, Part 1)	ECUADOR/DAC/CORPAQ/QUIPORT/Quito/Mariscal Sucre	TWY strip and shoulder, respectively, 30 m and 3.5 m wide. The aerodrome reference code es 4E	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/17 of its respective Report)	B	Extend the TWY shoulder to 10.5 m wide and publish the limitation of the strip width in the AIP-Ecuador "PENDING ACTION PLAN" ACTION PLAN: DGAC asked QUIPORT to enlarge the TWY strip where physical conditions allow it. The phyical limitation will be published in the Aerodrome Manual and in the AIP-Ecuador. In addition, a study is underway for using a traffic light system for controlling ground vehicules during wide body aircraft operation like B-767 (Doc DGAC-j-025-04, 25 JUN 2004). Quiport (operator) is working the final details to correct this deficiency until January 2006 (Doc DGAC-k3-O-05-1237, 05 DEC 2005).	ECUADOR/DAC/CORPAQ/QUIPORT	JAN/ 2006	
AGA 318 SAM	Physical Characteristics (Annex 14, Vol. I, Ch. 3)	ECUADOR/DAC/CORPAQ/QUIPORT/Quito/Mariscal Sucre	The distance between the TWY centre line and the RWY centreline is 104 m. For aerodrome reference code 4E, the minimum required is 182.5 m	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/18 of its respective Report)	A	DAC should publish this limitation in the AIP-Ecuador "PENDING ACTION PLAN" ACTION PLAN: DGAC will publish this information in the AIP-Ecuador as soon as QUIPORT carry out a physical characteristics study (Doc DGAC-j-025-04, 25 JUN 2004).	ECUADOR/DAC		
AGA 320 SAM	RWY Strip (Annex 14, Vol. I, Ch. 3)	ECUADOR/DAC/CORPAQ/QUIPORT/Quito/Mariscal Sucre	The RWY strip is less than 75 m wide in some areas near End 17	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/20 of its respective Report)	B	DAC should provide the publication of this limitation in the AIP-Ecuador "PENDING ACTION PLAN" ACTION PLAN: DGAC will publish this informaion in the AIP-Ecuador as soon as the operator (QUIPORT) finish the physical characteristics studies (Doc DGAC-j-025-04, 25 JUN 2004).	ECUADOR/DAC	JAN/ 2006	

OUTSTANDING DEFICIENCIES

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

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AGA 322 SAM	RESA (Annex 14, Vol. I, Ch. 3)	ECUADOR/DAC/CORPAQ/QUIPORT/Quito/Mariscal Sucre	There are no stopways and RESA at both RWY ends. After the RWY threshold of End 35, tehre is an extention of 167 m of available terrain until the fence	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/22 of its respective Report)	A	DAC should provide the construction of RESA at both RWY ends. The provision of stopway zones is also suggested "PENDING ACTION PLAN" ACTION PLAN: The earth fill and levelling were already started for RWY 17 (Doc DGAC-j-025-04, 25 JUN 2004). Quiport is working to finalize by February 2006 (Doc DGAC-k3-O-05-1237, 05 DEC 2005).	ECUADOR/DAC/CORPAQ/QUIPORT	AUG/ 2004	
AGA 326 SAM	Bird Hazards (Annex 14, Vol. I, Ch. 9/Amendment 5 & Doc 9137-AN/898, Part 3)	ECUADOR/DAC/GUAYAQUIL/Simón Bolívar	There is no National Bird Hazard Committee	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/26 of its respective Report	A	DAC should create a National Bird Hazard Committee "PENDING ACTION PLAN" ACTION PLAN: The Committee will be implemented in JAN 06 (Doc DGAC-k3-O-05-1237, 05 DEC 2005).	ECUADOR/DAC	JAN/ 2006	
AGA 329 SAM	Bird Hazards (Annex 14, Vol. I, Ch. 9, Doc 9137-AN/898, Part 3 & Doc 9184-AN/902, Part 1)	ECUADOR/GUAYAQUIL/Simón Bolívar	Some solid residues are delivered to the network of the served water of Guayaquil.	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/29 of its respective Report)	B	Implement adecuate process for collect the solid residues of the airport "PENDING ACTION PLAN" ACTION PLAN: New terminal with these facilities will start working in 27 JUL 06 (Doc DGAC-k3-O-05-1237, 05 DEC 2005).	ECUADOR/GUAYAQUIL	JUL/ 2006	
AGA 330 SAM	Emergency (Annex 14, Vol. I, Ch. 9)	ECUADOR/GUAYAQUIL/Simón Bolívar	No disbled aircraft removal plan	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/31 of its respective Report)	B	DAC should develop/implement a disabled aircraft removal plan "PENDING ACTION PLAN" ACTION PLAN: Agreement in process with local company (Doc DGAC-k3-O-05-1237, 05 DEC 2005).	ECUADOR/DAC	JUL/ 2006	

OUTSTANDING DEFICIENCIES

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

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AGA 331 SAM	TWY Strip (Annex 14, Vol. I, Ch. 3)	ECUADOR/DAC/GUAYAQUIL/Simón Bolívar	There are two open drainage canals parallel to the parallel TWY to End 21, located respectively 14 m and 27 m from the edge of the TWY shoulder. The aerodrome reference code is 4E. There is water accumulated in these canals as well as in two concrete tubes that cross under the TWYs due to soil accumutated on their bottom. Birds are attracted and many of them fly over the RWY birds	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Actions AGA/32 and AGA/33 of its respective Report)	B	Clean the drainage systems, close canals or relocate them out of the TWY strip. Develop/adopt procedures for maintaining the birds out of the airport "PENDING ACTION PLAN"	ECUADOR/DAC		
AGA 336 SAM	Emergency Access Road/Maintenance (Annex 14, Vol. I, Ch. 3, 8 & 9 & Doc 9137-AN/898, Part 8)	ECUADOR/DAC/GUAYAQUIL/Simón Bolívar	The emergency access road is in bad conditions and it is located 20 m from the RWY edges in some areas of the aerodrome (RWY right side, direction End 03 to End 21)	MAY/ 2003	ICAO Regular Mission (12-14 May 2003, Recommended Action AGA/38 of its respective Report)	B	Relocate and improve emergency access road "PENDING ACTION PLAN" ACTION PLAN: Construction is underway by the operator (Doc DGAC-k3-O-05-1237, 05 DEC 2005).	ECUADOR/DAC	MAY/ 2006	
AGA 339 SAM	TWY Shoulders (Annex 14, Vol. I, Ch. 3)	ECUADOR/DAC/GUAYAQUIL/Simón Bolívar	The TWY shoulder is only 7 m wide. The aerodrome reference code is 4E	MAY/ 2003	ICAO Regular Mission (12-14 MAY 2003, Recommended Action AGA/41 of its respective Report)	B	Extend the TWY shoulders to 10.5 m wide "PENDING ACTION PLAN"	ECUADOR/DAC		
GUY Guyana										
AGA 244 SAM	Bird Hazard (Annex 14, Vol. I, Ch. 9.5 and Doc 9137-AN/898)	Guyana/All international aerodromes	There is no National Bird Strike Committee	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	B	Establish a National Committee on Prevention of Bird Hazards "PENDING ACTION PLAN" (Doc GCAA-ICAO/5/312, 20 FEB 2004) ACTION PLAN: Bird Strike Committee to be formulated by SEP 2004 (Doc ICAO/5/3/1, 22 JUN 2004)	Guyana	SEP/ 2004	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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AGA 247 SAM	Visual aids (Doc 8733, Vol. II, FASID)	Guyana/TIMEHRI/Cheddi Jagan Int´l Airport	No precision approach Category I lighting system at RWY 06, as it is recommended by the Regional ANP	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	B	Install precision approach Category I lighting system at RWY 06 and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" INFORMATION: CAA says: "Extremely difficult, if not impossible, to install facility due to ravine and swamp in the approach area" (Doc ICAO/5/3/1, 22 JUN 2004)	Guyana	AUG/ 2005	CAA informs: "Extremely difficult, if not impossible, to install approach lighting for RWY 06 due to ravine and swamp in the approach area (Doc ICAO/5/3/1, 22 JUN 2004)
AGA 248 SAM	Visual aids (Doc 8733, Vol. II, FASID)	Guyana/TIMEHRI/Cheddi Jagan Int´l Airport	No TWY edge lighting, as it is recommended by the Regional ANP	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	B	Install TWY edge lighting and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: Procurement for TWY C edge lights in the 2005 budget. TWYs A and B received only reflective markers (Doc ICAO/5/3/1, 22 JUN 2004)	Guyana	AUG/ 2005	
AGA 252 SAM	Emergency/Other services (Annex 14, Vol. I, Ch. 9)	Guyana/TIMEHRI/Cheddi Jagan Int´l Airport	No ambulance available at the airport	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide ambulance for the airport "PENDING ACTION PLAN" ACTION PLAN: Approach will be made to the Ministry of Home Affairs/Ministry of Health to have this facility at CJIA (Doc GCAA-ICAO/5/312, 20 FEB 2004). Vehicle ordered (Doc ICAO/5/3/1, 22 JUN 2004)	Guyana	NOV/ 2004	
AGA 255 SAM	Emergency/Other services (Annex 14, Vol. I, Ch. 9.3)	Guyana/TIMEHRI/Cheddi Jagan Int´l Airport	No Disabled Aircraft Removal Plan	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	A	Develop a Disabled Aircraf Removal Plan and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: A disabled aircraft removal plan will be prepared and submitted to the GCAA (Doc GCAA-ICAO/5/312, 20 FEB 2004). Asked CJIA to develop Disabled Aircraft Removal Plan (Doc ICAO/5/3/1, 22 JUN 2004)	Guyana	OCT/ 2004	

OUTSTANDING DEFICIENCIES

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

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AGA 256 SAM	Airport development (Doc 9184-AN/902, Part 1)	Guyana/TIMEHRI/Cheddi Jagan Int´l Airport	The airport does not have updated master plan. The preliminary master plan was developed in 1993	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	B	Update master plan and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN" ACTION PLAN: The CJIA will take steps to commence the process for acquiring the services of a suitable consultant to prepare an updated Master Plan (Doc GCAA-ICAO/5/312, 20 FEB 2004). Need for Master Plan under review by Government (Doc ICAO/5/3/1, 22 JUN 2004)	Guyana	DEC/ 2004	
AGA 447 SAM	Annex 14, Vol. I, Ch. 9	GUYANA/CAA/SYCJ – TIMEHRI/Cheddi Jagan Int´l	The airport does not have medical doctors. It takes over 25 min for a doctor to arrive at the airport	JUN/ 2005	ICAO regular mission (02/03/JUN/2005, Recommended Action AGA/08 of its respective Report)	A	Provide medical doctors/facilities to the airport PROVIDED INFORMATION: Not practical at this time. Completion date TBD (Doc GCAA/ICAO/5/3/2, 28 SEP 05)	CAA/Airport Operator		
PAN Panama										
AGA 16 SAM	RWY surface conditions (Annex 14, Vol. I, Chap. 3)	Panama, PANAMA/Tocumen Aerodrome	Poor braking action at RWY 03L/31L		IFALPA CAR/SAM Meeting, 98REG049, Buenos Aires, 9/10 Dec. 1997 Fax letter DAC-1039-NA from Panama	A	Evaluate the causes of poor brake action/Eliminate the cause. ACTION TAKEN: Coordination for one project to eliminate the cracks of the runway 13R/21L and pavement surface improvement (US$ 300,000.00 costs) and another one to rehabilitate runway 13L/21R (US$ 300,000,000.00 costs)	Panama	2004	
AGA 340 SAM	Emergency Plans (Annex 14, Vol. I, Ch. 9 & Doc 9137-AN/898, Part 7)	PANAMA/DGAC	With exception of Tocumen Int´l Airport, the others do not have updated emergency plan	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/01 of its respective Report)	A	Update the emergency plans for the int´l airports "PENDING ACTION PLAN" ACTION PLAN: Tocumen has elaborated new Emergency Plan (FEB 2004). It will be delivered on 30 JUN 2004. Partial exercise planned for 02 APR 2004 (Doc 134/PAN/03/902).	PANAMA/DGAC		

OUTSTANDING DEFICIENCIES

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

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AGA 341 SAM	RFF (Annex 14, Vol. I, Ch. 9)	PANAMA/DGAC/BOCAS DEL TORO/Bocas del Toro	The airport does not have RFF services. The Regional ANP recommends RFF Category 5	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/02 of its respective Report)	A	Provide the RFF services for this airport "PENDING ACTION PLAN"	PANAMA/DGAC		
AGA 342 SAM	Visual Aids (Annex 14, Vol. I, Ch. 5 & Doc 8733, FASID CAR/SAM - AOP)	PANAMA/DGAC/BOCA DEL TORO/Boca del Toro	There is no PAPI for both Ends (RWY 08/25)	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/04 of its respective Report)	B	Install the PAPIs as it recommends the Regional ANP "PENDING ACTION PLAN"	PANAMA/DGAC		
AGA 343 SAM	RFF (Annex 14, Vol. I, Ch. 9 & Doc 9733, FASID CAR/SAM - AOP)	PANAMA/DGAC/CHANGUINOLA/Cap. Manuel Niño	The airport does not have RFF services. The Regional ANP recommends RFF Category 5	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/05 of its respective Report)	A	Provide RFF Category 5 according to the Regional ANP "PENDING ACTION PLAN"	PANAMA/DGAC		
AGA 344 SAM	Visual Aids (Annex 14, Vol. I, Ch. 5 & Doc 8733, FASID CAR/SAM - AOP)	PANAMA/DGAC/CHANQUINOLA/Cap. Manuel Niño	There is no PAPI for RWY 03 as it recommends the Regional ANP	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/07 of its respective Report)	B	Install the PAPI for RWY 03, as recommended by the Regional ANP "PENDING ACTION PLAN"	PANAMA/DGAC		
AGA 345 SAM	Visual Aids (Annex 14, Vol. I, Ch. 5 & Doc 8733, FASID CAR/SAM - AOP)	PANAMA/DGAC/CHANGUINOLA/Cap. Manuel Niño	The RWY marking aids need to be repainted	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/08 of its respective Report)	A	Repaint the RWY marking aids "PENDING ACTION PLAN"	PANAMA/DGAC	DEC/ 2003	
AGA 346 SAM	RFF (Annex 14, Vol. I, Ch. 9 & Doc 8733, FASID CAR/SAM - AOP)	PANAMA/DGAC/DAVID/Enrique Malek	The airport does not have RFF services. The Regional ANP recommends RFF Category 5	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/09 of its respective Report)	A	Provide RFF services Category 5 for this airport according to the Regional ANP "PENDING ACTION PLAN"	PANAMA/DGAC		
AGA 348 SAM	ANP (Doc 8733, FASID CAR/SAM - AOP)	PANAMA/DGAC/Tocumén	According to the Regional ANP, RWY 21L should be NPA type and it should have simple approach lighting system. Currently, the RWY is NINST and it does not have simple approach lighting system	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/13 of its respective Report)	B	Provide NPA type RWY and simple approach lighting system for RWY 21L according to the Regional ANP "PENDING ACTION PLAN" ACTION PLAN: 400 m expansion of RWY 04D scheduled for JUN 2005. Installation of Simple Approach Lighting System scheduled for JAN 2006, RWY 21 (Doc 134/PAN/03/902)	PANAMA/DGAC	JAN/ 2006	

OUTSTANDING DEFICIENCIES

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

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AGA 349 SAM	Visual Aids (Annex 14, Vol. I, Ch. 5 & Doc 8733, FASID CAR/SAM - AOP)	PANAMA/DGAC/Tocumén	There is no PAPI for RWY 21L, as it recommends the Regional ANP	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/14 of its respective Report)	B	Install PAPI for RWY 21L, according to the recommendation of the Regional ANP "PENDING ACTION PLAN" ACTION PLAN: Scheduled to be installed in JUN 2004 (Doc 134/PAN/03/902).	PANAMA/DGAC	JUN/ 2004	
AGA 350 SAM	Visual Aids (Annex 14, Vol. I, Ch. 5 & Doc 8733, FASID CAR/SAM - AOP)	PANAMA/DGAC/Tocumen	There is no PAPI for RWY 21R, as it recommends the Regional ANP	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/16 of its respective Report	B	Install PAPI for RWY 21R, according to the recommendation of the ANP "PENDING ACTION PLAN" ACTION PLAN: To be installed in 2006 (Doc 134/PAN/03/902).	PANAMA/DGAC	2006	
AGA 351 SAM	Visual Aids (Annex 14, Vol. I, Ch. 5 & Doc 8733, FASID CAR/SAM -AOP)	PANAMA/DGAC/Tocumén	There is no RWY side stripe marking, as it recommends the Regional ANP	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/17 of its respective Report)	B	Paint the RWY side stripe marking according to the recommendation of the Regional ANP "PENDING ACTION PLAN" ACTION PLAN: A new AC layer will be constructed in 2004 (Doc 134/PAN/03/902).	PANAMA/DGAC	2004	
AGA 352 SAM	Master Planning (Doc 9184-AN/902, Part 1)	PANAMA/DGAC	The master plans for Colon Airport and Tocumen Int´l Airport are, respectively, updated and non-updated. The other airports do not have master plans	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/18 of its respective Report)	B	Update the Master Plan of Tocumen Int´l Airport. Develop master plans for the other airports "PENDING ACTION PLAN" ACTION PLAN: Tocumen S.A. solicited ICAO to contract IATA for developing a Master Plan. In contracting process. Delivery scheduled for MAR 2005 (Doc 134/PAN/03/902).	PANAMA/DGAC	MAR/ 2005	
AGA 353 SAM	Emergency (Annex 14, Vol. I, Ch. 9)	PANAMA/DGAC	There are no plans for removal of disabled aircraft at the airports. For Tocumen, the disabled aircraft removal plan is under the airlines responsibility	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/19 of its respective Report)	B	Develop disabled aircraft removal plans for the international airports "PENDING ACTION PLAN" ACTION PLAN: Tocumen S.A. has initiated alternative studies for the solution of aircraft removal plan, Tocumen will have an aircraft removal plan in JUL 2004 (Doc 134/PAN/03/902).	PANAMA/DGAC	JUL/ 2004	

OUTSTANDING DEFICIENCIES

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

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AGA 354 SAM	FOD/Mantenimiento (Annex 14, Vol. I, Ch. 9 & Doc 9137-AN/898, Parts 8 & 9	PANAMA/DGAC	There are no mechanical sweepers at the international airports and no special attention is given to FOD	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/21 of its respective Report)	A	Comply with the ICAO recommendations in terms of daily inspections, cleaning the surfaces, etc "PENDING ACTION PLAN"	PANAMA/DGAC		
AGA 355 SAM	Visual Aids (Annex 14, Vol. I, Ch. 5)	PANAMA/DGAC/Tocumén	The marking aids of RWY 03L/21R are faded	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/22 of its respective Report)	A	Provide the painting of the RWY marking aids "PENDING ACTION PLAN" ACTION PLAN: Touchdown zone painted. General painting in the rehabilitation project. Starts in JUN 2004, ends MAY 2005 (Doc 134/PAN/03/902).	PANAMA/DGAC	MAY/ 2005	
AGA 356 SAM	Obstacles (Annex 14, Vol. I, Ch. 4 & 8)	PANAMA/DGAC/Tocumén	There is an open drainage canal, approximately, 150 m beyond the threshold of End 03L. This canal is dangerous for any aircraft that is landing or taking off (overrunning the RWY)	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/23 of its respective Report)	B	Provide a covering for the canal or its relocation outside the RWY operational area "PENDING ACTION PLAN" ACTION PLAN: Covering will be started in JUN 2004, ends FEB 2005 (Doc 134/PAN/03/902).	PANAMA/DGAC	FEB/ 2005	
AGA 357 SAM	RWY Strip/Bird Harzards (Annex 14, Vol. I, Ch. 3 & 9, Amendment 5 to Annex 14)	PANAMA/DGAC/Tocumén	There is a depression near End 03/R and other parts of the RWY strip are also unlevelled. The grass is as high as 1.5 m in some areas. This is a good environment for birds	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/24 of its respective Report)	A	Level the RWY strip. Maintain the gras at adequate height "PENDING ACTION PLAN" ACTION PLAN: Levelling of the RWY strip is included in a project to be started in JUN 2004 and finished in FEB 2005. Gras was cut. New equipment for cutting grass will be bought until DEC 2004 (Doc 134/PAN/03/902).	PANAMA/DGAC	FEB/ 2005	
AGA 358 SAM	Drainage (Annex 14, Vol. I, Ch. 9 & Doc 9137-AN/898, Part 9)	PANAMA/DGAC/Tocumén	There is a drainage canal in the RWY strip and the drainage system needs better maintenance	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/25 of its respective Report)	B	Clean and maintain the drainage system, keeping it free of accumulated water "PENDING ACTION PLAN" ACTION PLAN: The cleaning and maintenance of the drainage system will be done from JUN 2004 to FEB 2005 (Doc 134/PAN/03/902).	PANAMA/DGAC	FEB/ 2005	

OUTSTANDING DEFICIENCIES

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

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AGA 359 SAM	Obstacles (Annex 14, Vol. I, Ch. 3 & 8)	PANAMA/DGAC/Tocumén	There is an installation (small construction) on the RWY strip, which is frangible but its base is rigid and it is approximately 30 cm high. In additon, the antenna towers are not frangible. The same problem occurs with the ILS localizer, which is frangible but its base is rigid and approximately 30 cm high	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/26 of its respective Report)	B	Correct these problems, lowering down the rigid bases up to the terrain surface and transform the rigid structures in frangible structures. "PENDING ACTION PLAN" ACTION PLAN: Included in the PROJECT 3. Starts in JUN 2004, ends FEB 2005 (Doc 134/PAN/03/902).	PANAMA/DGAC	FEB/ 2005	
AGA 360 SAM	RESA (Annex 14, Vol. I, Ch. 3)	PANAMA/DGAC/Tocumén	RWY 21L has stop way zone and 260 m of unlevelled terrain that can work as RESA	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/27 of its respective Report)	B	Level the area beyond the stop way for working as RESA "PENDING ACTION PLAN" ACTION PLAN: Included in Project 3. Starts in JUN 2004, ends FEB 2005 (Doc 134/PAN/03/902).	PANAMA/DGAC	FEB/ 2005	
AGA 361 SAM	Emmergency Access Road (Annex 14, Vol. I, Ch. 3, 8 & 9)	PANAMA/DGAC/Tocumén	There are no emergency access roads. This aspec becomes very important and dangerous because there is no way to arrive at the approaches areas of both RWY Ends	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/28 of its respective Report)	A	Construct emergency access roads "PENDING ACTION PLAN" ACTION PLAN: Included in Project 3. Starts in JUN 2004, ends FEB 2005 (Doc 134/PAN/03/902).	PANAMA/DGAC	FEB/ 2005	
AGA 362 SAM	TWY Strip (Annex 14, Vol. I, Ch. 3 & Doc 9157-AN/901, Part 2)	PANAMA/DGAC	The TWY shoulders are 5 m wide. The aerodrome reference code is 4E	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recomended Action AGA/29 of its respective Report)	B	Enlarge the TWY shoulders to 10.5 m wide "PENDING ACTION PLAN" ACTION PLAN: Included in the Project 3. Starts JUN 2004, ends FEB 2005 (Doc 134/PAN/03/902).	PANAMA/DGAC	FEB/ 2005	
AGA 363 SAM	Visual Aids (Annex 14, Vol. I, Ch. 5)	PANAMA/DGAC/Tocumén	There are some markings on the RWY surface in yellow colour and not in accordance to ICAO SARPs	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/30 of its respective Report)	A	Paint the RWY surface markings according to Chapter 5 of Annex 14, Volume I "PENDING ACTION PLAN" ACTION PLAN: Changed marking color from yellow to white for RWY 03R/21L in FEB 2004. RWY 03L/21R painting was requested (Doc 134/PAN/03/902).	PANAMA/DGAC	AUG/ 2005	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AGA 364 SAM	Emergency/COE (Annex 14, Vol. I, Ch. 9)	PANAMA/DGAC/Tocumén	The airport operations centre (COE) is not well located because it does not provide a clear view of the movement area and isolated aircraft parking position. Several people, in one room, can trigger the phone calls in case of emergency	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/31 of its respective Report)	A	Clearly define who is in charge to trigger the phone calls in the Emergency Operations Centre. A room should be prepared for the COE and only the person on duty, responsible for triggering the phone calls in case of emergency, should stay there. The telephone numbers should be exposed in big numbers, in order of priority, in front of the operator. Good location should be provided for the COE "PENDING ACTION PLAN" ACTION PLAN: Tocumen´s personnel visited Santiago and Quito for knowing their installations. Design for constructing of new installations for COE. Starts in JUN 2004, ends DEC 2005 (Doc 134/PAN/03/902).	PANAMA/DGAC	DEC/ 2005	
AGA 369 SAM	FOD/Bird Hazards (Annex 14, Vol. I, Ch. 9, Amendment 5 to Annex 14 & Doc 9137-AN/898, Parts 8 & 9)	PANAMA/DGAC/Tocumén	FOD was found at the aprons surface, such as: papers, plastic, metals, coarse and fine aggregates, etc. In addition, birds were getting food (rest of food from the aircraft) from the deposits of FOD	MAY/ 2003	ICAO Regular Mission (19-20 MAY 2003, Recommended Action AGA/36 of its respective Report)	A	Maintain the pavement surfaces free of FOD, carrying out daily inspections according to ICAO recommendations. Rests of food should not be kept in the deposits, which should be covered "PENDING ACTION PLAN" ACTION PLAN: Budget for acquisition of a mechanical sweeper and new recipients with covering for rest of food was approved. Scheduled for AUG 2004 (Doc 134/PAN/03/902).	PANAMA/DGAC	AUG/ 2004	
AGA 463 SAM	Annex 14, Vol. I, Ch. 9	PANAMA/DGAC	The National Bird/Wildlife Hazard Prevention Committee is not active	APR/ 2006	ICAO regular mission (26-28/APR/06, New Recommended Action AGA/02 of its respective Report)	A	Reactivate the National Bird/Wildlife Hazard Prevention Committee	PANAMA/DGAC		

OUTSTANDING DEFICIENCIES

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

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AGA 464 SAM	Doc 8733, Vol. II, FASID	PANAMA/DGAC/BOCAS DEL TORO	ANP requires ATR 72 as critical aircraft; 21 ton maximum load. Only small aircraft are allowed to operate with maximum load of 26,499 lb	MAY/ 2003	ICAO regular mission (19-20 MAY/03, Recommended Action AGA/03 of its respective Report)	B	Officialy solicit the SAM Office to update the ANP	PANAMA/DGAC		
AGA 465 SAM	Doc 8733, Vol. II, FASID	PANAMA/DGAC/CHANGUINOLA	ANP requires ATR 72 as critical aircraft; 21 ton maximum load, Only small aircraft are allowed to operate with maximum load of 47,740 lb	MAY/ 2003	ICAO regular mission (19-20 MAY/03, Recommended Action AGA/06 of its respective Report)	B	Officialy solicit the SAM Office to update the ANP	PANAMA/DGAC/CHANGUINOLA		
AGA 466 SAM	Doc 8733, Vol. II, FASID	PANAMA/DGAC/DAVID/Enrique Malek	ANP requires reference code 3C; Rwy is 2050 m long; 21 ton maximum load; critical aircraft: ATR72. Rwy is 2100 m long and allowable load is 209,625 lb	MAY/ 2003	ICAO regular mission (19-20 MAY/03, Recommended Action AGA/10 of its respective Report)	B	Officialy solicit the SAM Office to update the ANP	PANAMA/DGAC/DAVID/Enrique Malek		
AGA 467 SAM	Doc 8733, Vol. II, FASID	PANAMA/DGAC/Marcos A. Gelabert	ANP requires Rwy 1790 long; without parallel Twy to End 18; edge twy lights. Rwy is 1800 m long; there is parallel twy to End 18 and lights at twys intersections.	MAY/ 2003	ICAO regular mission (19-20 MAY/03, Recommended Action AGA/11 of its respective Report)	B	Officialy solicit the SAM Office to update the ANP	PANAMA/DGAC/Marcos A. Gelabert		
AGA 468 SAM	Doc 8733, Vol. II, FASID	PANAMA/DGAC/TOCUMEN S.A.	ANP requires rwy 03L/21R 2600 m long. It is 2682 m long	MAY/ 2003	ICAO regular mission (19-20 MAY/03, Recommended Action AGA/15 of its respective Report)	B	Officialy solicit the SAM Office to update the ANP	PANAMA/DGAC/TOCUMEN S.A.		
AGA 469 SAM	Annex 14, Vol. I, Ch. 8	PANAMA/DGAC	The int´l airports have perimetric fences but they are unprotected against vandalism	MAY/ 2003	ICAO regular mission (19-20 MAY/03, Recommended Action AGA/20 of its respective Report)	A	Provide perimetric fences and respective protection against vandalism for int´l airports	PANAMA/DGAC		
PER Peru										
AGA 379 SAM	Doc 8733, FASID CAR/SAM – AOP	PERU/DGAC/LAP/Jorge Chávez	No simple approach lighting system for RWY 33	MAY/ 2004	ICAO regular mission (17-18 MAY 2004, Recommended Action AGA/10 of its respective Report)	B	Install simple approach lighting system for RWY 33 "PENDING ACTION PLAN"	LAP		
AGA 380 SAM	Doc 8733, FASID CAR/SAM – AOP	PERU/DGAC/CORPAC/Pisco	RFF CAT 7	MAY/ 2004	ICAO regular mission (17-18 MAY 2004, Recommended Action AGA/11 of its respective Report)	A	Upgrade RFF to CAT 9 "PENDING ACTION PLAN"	DGAC/CORPAC		

OUTSTANDING DEFICIENCIES

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

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AGA 381 SAM	Doc 8733, FASID CAR/SAM – AOP	PERU/DGAC/CORPAC/ Pisco	No PAPI for RWY 04	MAY/ 2004	ICAO regular mission (17-18 MAY 2004, Recommended Action AGA/13 of its respective Report)	B	Install PAPI for RWY 04 "PENDING ACTION PLAN"	DGAC/CORPAC		
PRY Paraguay										
AGA 60 SAM	RWY surface conditions (Annex 14, Vol. I, Chap. 3)	Paraguay, Aerodrome of Asuncion/Silvio Pettirossi	Runway heavily distressed functionally and structurally	JUL/ 2001	Detected during mission conducted by ICAO Secretariat Planned for 2003, fax letter dated 22 NOV 2002 from Paraguay	A	Run functional and structural evaluation. Correct distress and rehabilitate pavement as indicated by the structural evaluation "PENDING ACTION PLAN"	Paraguay	2003	
AGA 61 SAM	Friction characteristics of runway surface (Annex 14, Vol. I, Chaps. 2, 3, 9)	Paraguay, Aerodrome of Asuncion/Silvio Pettirossi	No friction characteristics measured and reported of pilots	SEP/ 2001	Detected during mission conducted by ICAO Secretariat Planned for 2003, fax letter 22 NOV 2002 from Paraguay	B	Periodically measure the coefficient of the friction of the runway and report the friction characteristics for the pilots. ACTION TAKEN: Program for training personnel, Contact with Brazil for technical cooperation and contacts with two universities in Asunción	Paraguay	2003	
AGA 62 SAM	Runway shoulder (Annex 14, Vol. I, Chap. 3)	Paraguay, Aerodrome of Asuncion/Silvio Pettirossi	Runway shoulder 4m wide	SEP/ 2001	Detected during mission conducted by ICAO Secretariat Planned for 2003, fax 22 NOV 2002 from Paraguay	B	Enlarge the width of the runway shoulders to 7.5 m. ACTION TAKEN: Studies and project are under development	Paraguay	2003	
AGA 63 SAM	Runway strip (Annex 14, Vol. I, Chap. 3)	Paraguay, Aerodrome of Asuncion/Silvio Pettirossi	Runway strip unlevelled and narrow	SEP/ 2001	Detected during mission conducted by ICAO Secretariat Planned for 2003, fax letter 22 NOV 2002 from Paraguay	B	Level and enlarge the RWY strip to 150 m wide on each side of the runway centre line. ACTION TAKEN: Depend upon availability of resources	Paraguay	2003	Lack of financial resources
AGA 65 SAM	Rescue and Fire Fighting Service (Annex 14, Vol. I, Chap. 9)	Paraguay, Aerodrome of Asuncion/Silvio Pettirossi	Access near the fire station to the runway is not straightforward	SEP/ 2001	Detected during mission conducted by ICAO Secretariat Planned for 2003, fax letter 22 NOV 2002 from Paraguay	B	Construct straightforward access near the fire station. ACTION TAKEN: There is a design in final phase for constructing a rapid exit to the runway and the reallocation of the RFF to the north sector of the apron in accordance with the Master Plan of the airport.	Paraguay	2003	

OUTSTANDING DEFICIENCIES

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

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AGA 66 SAM	Control tower (Doc 9184, Part 1)	Paraguay, Aerodrome of Asuncion/Silvio Pettirossi	There are four concrete columns inside the control tower interfering in the visibility of the controllers	SEP/ 2001	Detected during mission conducted by ICAO Secretariat Planned for 2003, fax letter 22 NOV 2002 from Paraguay	B	Construct one control room one floor up if the construction has the required strength to do so. ACTION TAKEN: Studies are being conducted in order to analyze the options to construct one floor up for the control room	Paraguay	2003	
AGA 269 SAM	Bird Strike (Amendment 5, Annex 14, vol. I)	Paraguay/DINAC	There are no National Bird Hazard Committee and Airport Coordination Committees	MAR/ 2004	ICAO Regular Mission (07/08 AUG 2003 - Recommended Action AGA/01of its respective Report)	A	Create National Bird Hazard Committee and Airport Coordination Committees "PENDING ACTION PLAN" *(Doc P/DINAC No. 695/2004, 24 JUN 2004)	DINAC	DEC/ 2004	
AGA 270 SAM	Emergency Plans (Annex 14, Vol. I, Cap. 9 & Doc 9137-AN/898)	Paraguay/DINAC	Emergency Plans are not updated	MAR/ 2004	ICAO Regular Mission (07/08 AUG 2003 - Recommended Action AGA/02 of its respective Report)	A	Update Emergency Plans "PENDING ACTION PLAN" *(Doc P/DINAC No. 695/2004, 24 JUN 2004)	DINAC	DEC/ 2004	
AGA 271 SAM	Aerodrome Certification (Annex 14, Vol. I, Sec. 1.3, Doc 9774)	Paraguay/DINAC	There is no basic documentation for aerodrome certification	MAR/ 2004	ICAO Regular Mission (07/08 AUG 2003 - Recommended Action AGA/03 of its respective Report)	A	Prepare basic documentation for aerodrome certification and start certification process "PENDING ACTION PLAN" *(Doc P/DINAC No. 695/2004, 24 JUN 2004)	DINAC	DEC/ 2004	
AGA 272 SAM	Doc 8733, FASID CAR/SAM - AOP	Paraguay/SGAS - ASUNCIÓN / Aerpuerto Int´l Silvio Pettirossi	The information on aerodrome reference code, critical aircraft and all-up mass are not consistent	MAR/ 2004	ICAO Regular Mission (07/08 AUG 2003, Recommended Action AGA/04 of its respective Report)	B	Send correct information and solicit the SAM Office to take the necessary steps "PENDING ACTION PLAN" *(Doc P/DINAC No. 695/2004, 24 JUN 2004)	DINAC	DEC/ 2004	
AGA 273 SAM	Emergency (Annex 14, Vol. I, Sec. 9.3 & Doc 9173, Part 5)	Paraguay/DINAC	There are no disabled aircraft removal plans	MAR/ 2004	ICAO Regular Mission (07/08 AUG 2003, Recommended Action AG/09 of its respective Report)	A	Develop disabled aircraft removal plans "PENDING ACTION PLAN" *(Doc P/DINAC No. 695/2004, 24 JUN 2004)	DINAC	DEC/ 2004	
AGA 274 SAM	Emergency (Annex 14, Vol. I, Sec. 9.1)	Paraguay/SGAS - ASUNCIÓN/Aeropuerto Int´l Silvio Pettirossi	The COE is not well structured. There is no responsible for trigger it in case of emergency	MAR/ 2004	ICAO Regular Mission (07/08 AUG 2003, Recommended Action AGA/10 of its respective Report)	A	Re-strusture the COE. Keep responsible for trigger it in case of emergency "PENDING ACTION PLAN" *(Doc P/DINAC No. 695/2004, 24 JUN 2004)	DINAC	DEC/ 2004	

OUTSTANDING DEFICIENCIES

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

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AGA 275 SAM	RWY Strip (Annex 14, Vol. I, Sec. 3.3 and 8.7 & Cap. 8 of its Appendix)	Paraguay/SGAS - ASUNCIÓN/Aeropuerto Int´l Silvio Pettirossi	Rigid bases for the ILS localizer antennae	MAR/ 2004	ICAO Regular Misión (07/08 AUG 2003, Recommended Action AGA/11 of its respective Report)	A	Eliminate rigid bases and provide frangible entire set "PENDING ACTION PLAN" *(Doc P/DINAC No. 695/2004, 24 JUN 2004)	DINAC	DEC/ 2004	
SUR Suriname										
AGA 230 SAM	Bird Hazard (Annex 14, Vol. I, Ch. 9.5 and its Amendment No. 5, Doc 9137-AN/898, Part 3 and Doc 9332)	Suriname/All aerodromes	There is no Bird Strike Committee	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	A	Establish a National Committe on Prevention of Bird Hazards "PENDING ACTION PLAN"	Suriname		
AGA 232 SAM	Visual aids (Doc 8733, Vol. II, FASID)	Suriname/NICKERIE/Maj. Fernandes Aerodrome	There are no PAPIS in both RWYs, as they were recommended by the Regional ANP	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	B	Install PAPIs in both RWYs and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN"	Suriname		
AGA 233 SAM	Visual aids (Doc 8733, Vol. II, FASID)	Suriname/NICKERIE/Maj. Fernandes Aerodrome	No RWY side stripe marking, as it is recommended by the Regional ANP	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	B	Provide RWY side stripe marking and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN"	Suriname		
AGA 234 SAM	Visual aids (Doc 8733, Vol. II, FASID)	Suriname/PARAMARIBO/Zorg en Hoop Aerodrome	No PAPIs in both RWYs, as they were recommended by the Regional ANP	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	B	Install PAPIs in both RWYs and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN"	Suriname		
AGA 241 SAM	Physical characteristics/Object on RWY Srip (Annex 14, Vol. I, Ch. 3.3 and its Attach. A, Par. 8.2)	Suriname/Johan Adolf Pengel Aerodrome	Presence of a concrete box 130 cm long, 120 cm wide and 30 cm high at each side of the End 11 treshold	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	B	Attend Paragraph 3.3 of Annex 14, Vol. I and Paragraph 8.2 of its Attachment A and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN"	Suriname		
AGA 242 SAM	Physical characteristics/Object in RWY strip (Annex 14, Vol. I, Ch. 3.3 and its Attach. A, Par. 8.2)	Suriname/ZANDERY/Johan Adolf Pengel Aerodrome	Presence of a concrete box 200 cm long, 60 cm wide and 20 cm high at 15 m laterally away from End 11. This box is a rigid base for a frangible vertical sign	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	B	Attend Paragraphs 3.3 and 8.7 of Annex 14, Vol. I and Paragraph 8.2 of its Attachment A and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN"	Suriname		
AGA 243 SAM	Emergency/Other services (Annex 14, Vol. I, Ch. 9.3)	Suriname/ZANDERY/Johan Adolf Pengel Aerodrome	There is no Disabled Aircraft Removal Plan	NOV/ 2002	Detected during mission conducted by ICAO Secretariat	B	Develop a Disabled Aircraft Removal Plan and/or inform the ICAO SAM Office when it will be done "PENDING ACTION PLAN"	Suriname		

OUTSTANDING DEFICIENCIES

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

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AGA 430 SAM	Annex 14, Vol. I, Ch. 1 & Doc 9774	SURINAME/CAA	No basic documentation published for aerodrome certification	JUN/ 2005	ICAO regular mission (30/31/MAY-01 JUN/2005, Recommended Action AGA/02 of its respective Report)	B	Prepare and publish basic documentation for aerodrome certification	CAA		
AGA 431 SAM	Annex 14, Vol. I, Ch. 9 & Doc 9773, Part 5	SURINAME/CAA	No disabled aircraft removal plan for int´l airports	JUN/ 2005	ICAO regular mission (30/31/MAY-01 JUN/2005, Recommended Action AGA/03 of its respective Report)	B	Provide disabled aircraft removal plans for int´l airports	CAA		
AGA 432 SAM	Doc 8733 FASID CAR/SAM - AOP	SURINAME/SMNI – NEW/NICKERIE/Maj. Fernandes	RWY Reference Code 1A in the ANP, instead of 1B	JUN/ 2005	ICAO regular mission (30/31/MAY-01 JUN/2005, Recommended Action AGA/04 of its respective Report)	B	Request Amendment to correct ANP	CAA		
AGA 433 SAM	Doc 8733 FASID CAR/SAM - AOP	SURINAME/SMNI – NEW/NICKERIE/Maj. Fernandes	ANP requires TWY centerline & holding position marking	JUN/ 2005	ICAO regular mission (30/31/MAY-01 JUN/2005, Recommended Action AGA/05 of its respective Report)	B	Request Amendment to correct ANP	CAA		
AGA 434 SAM	Doc 8733, FASID CAR/SAM – AOP	SURINAME/SMZO – PARAMARIBO/Zorg en Hoop	RWY Reference Code 1A in the ANP, instead of 1B	JUN/ 2005	ICAO regular mission (30/31/MAY-01 JUN/2005, Recommended Action AGA/06 of its respective Report)	B	Request Amendment to correct ANP	CAA		
AGA 435 SAM	Doc 8733, FASID CAR/SAM – AOP	SURINAME/SMZO – PARAMARIBO/Zorg en Hoop	No RWY designation marking at RWY 29 (ANP requirement)	JUN/ 2005	ICAO regular mission (30/31/MAY-01 JUN/2005, Recommended Action AGA/07 of its respective Report)	A	Provide designation marking for RWY 29, according to ANP	CAA		
AGA 436 SAM	Doc 8733, FASID CAR/SAM – AOP	SURINAME/SMUP – ZANDERLY/Johan Adolf Pengel Int´l	No precision approach lighting system for RWY 11 (ANP requirement)	JUN/ 2005	ICAO regular mission (30/31/MAY-01 JUN/2005, Recommended Action AGA/08 of its respective Report)	B	Install precision approach lighting system for RWY 11, according to ANP	CAA/Airport Operator		
AGA 437 SAM	Annex 14, Vol. I, Chs. 3 & 4	SURINAME/SMUP – ZANDERLY/Johan Adolf Pengel Int´l	RWY strip does not have adequate width at RWY North side (canal, ground elevation and fence on the strip)	JUN/ 2005	ICAO regular mission (30/31/MAY-01 JUN/2005, Recommended Action AGA/09 of its respective Report)	B	Eliminate obstacles & provide RWY strip 150 m wide	CAA/Airport Operator		
AGA 438 SAM	Annex 14, Vol. I, Ch. 4	SURINAME/SMUP – ZANDERLY/Johan Adolf Pengel Int´l	Trees penetrating the transitional surface, at North side of the runway	JUN/ 2005	ICAO regular mission (30/31/MAY-01 JUN/2005, Recommended Action AGA/10 of its respective Report)	A	Cut the trees leaving the transitional surface free of obstacle, at North side of the runway	CAA/ Airport Operator		
AGA 439 SAM	Annex 14, Vol. I, Ch. 1 & Doc 9774	SURINAME/SMUP – ZANDERLY/Johan Adolf Pengel Int´l	The aerodrome is not certified yet according to Doc 9774	JUN/ 2005	ICAO regular mission (30/31/MAY-01 JUN/2005, Recommended Action AGA/11 of its respective Report)	B	The airport need to be certified according to Doc 9774	CAA/Airport Operator		

OUTSTANDING DEFICIENCIES

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

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URY Uruguay										
AGA 259 SAM	Visual Aids (Doc 8733, FASID CAR/SAM - AOP)	Uruguay/SUCA-COLONIA/Colonia Int´l	There is no PAPI installed for RWY 12	MAR/ 2004	ICAO Regular Mission (05/06 AUG 2003 - Recommended Action AGA/04 of its respective Report)	A	Install PAPI for RWY 12 "PENDING ACTION PLAN" ACTION PLAN: There are obstacles at the approach to RWY 12. A GPS-NPA approach procedure to be syncronized with the PAPIs is being designed (Fax 075/04, 21 SEP 2004, from DINACIA)	Uruguay/DINACIA		
AGA 265 SAM	Visual Aids (Doc 8733, FASID CAR/SAM - AOP)	Uruguay/SUMU-MONTEVIDEO/Carrasco Int´l Gral. Cesáreo L. Benisso	Simple approach lighting system not installed for RWY 06	MAR/ 2004	ICAO Regular Mission (05/06 AUG 2003 - Recommended Action AGA/16 of its respective Report)	A	Install the simple approach lighting system for RWy 06 "PENDING ACTION PLAN" ACTION PLAN: To be installed in 2005/2006 (Fax 075/04, 21 SEP 2004, from DINACIA)	DINACIA	2006	
AGA 266 SAM	Emergency (Annex 14, Vol. I, Ch. 9 & Doc 9173, Part 5)	Uruguay/DINACIA/All int´l airports	There are no disabled aircraft removal plans for int´l airports	MAR/ 2004	ICAO Regular Mission (05/06 AUG 2003 - Recommended Action AGA/35 of its respective Report)	B	Prepare disabled aircraft removal plans for the int´l airports "PENDING ACTION PLAN"	DINACIA		
AGA 267 SAM	Phisical Characteristics (Annex 14, Vol. I, Ch. 3)	Uruguay/SUMU-MONTEVIDEO/Carrasco Int´l Gral. Cesáreo L. Benisso	The TWY does not have strips	MAR/ 2004	ICAO Regular Mission (05/06 AUG 2003 - Recommended Action AGA/36 of its respective Report)	B	Construct TWY strips "PENDING ACTION PLAN" ACTION PLAN: Construction scheduled for 2005/2006 (Fax 075/04, 21 SEP 2004, from DINACIA)	DINACIA	2006	
AGA 268 SAM	Equipment and Installations (Annex 14, Vol. I, Section 8.7 & Cap. 8 of its Apendix A	Uruguay/SUMU-MONTEVIDEO/Carrasco Int´l Gral. Cesáreo L. Benisso	Frangible tower installed over rigid base on RWY strip (West side of RWY 19)	MAR/ 2004	ICAO Regular Mission (05/06 AUG 2003 - Recommended Action AGA/37 of its respective Report)	B	Provide frangible base for the tower "PENDING ACTION PLAN"	DINACIA		
VEN Venezuela										
AGA 17 SAM	Radio aids (Annex 14, Vol. I. Chap. 5 and Doc 8733, Vol. II, FASID)	Venezuela, MARACAIBO/La Chinita Aerodrome	ILS inoperative, the ILS Outer Marker is not provided		IFALPA CAR/SAM Meeting, 98REG049, Buenos Aires, 9/10 Dec. 1997	A	Activate and implement the facilities "PENDING ACTION PLAN" ACTION PLAN: Scheduled correction starting JUN07 (IP/31-GREPECAS-14/16-20 APR07)	Venezuela	JUN/ 2007	

OUTSTANDING DEFICIENCIES

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1	2	3	4	5	6	7	8	9	10	11
AGA 76 SAM	RWY surface conditions (Annex 14, Vol. I, Chap. 3)	Venezuela, CARACAS/Maiquetia Aerodrome	Apron with cracks, potholes, rutting, vegetation growth and raveling		IATA Report of the Venezuela Airport Operational Assessment, March 05-08, 2001*	B	Begin immediate planning for apron rehabilitation "PENDING ACTION PLAN" ACTION PLAN: Repairs are underway (IP/31-GREPECAS-14/16-20 APR07)	Venezuela	AUG/ 2007	
AGA 77 SAM	Apron surface conditions (Annex 14, Vol. I, Chap. 3)	Venezuela, BARCELONA, Barcelona Intl. Airport	Slabs with spalling, corner cracks and most of the joints with deficient sealing in runway 33		IATA Report of the Venezuela Airport Operational Assessment, March 05-08, 2001*	B	Repair the slabs at the beginning "PENDING ACTION PLAN" ACTION PLAN: There is a plan to rehabilitate this area on NOV07 (IP/31-GREPECAS-14/16-20 APR07)	Venezuela	2008	
AGA 78 SAM	RWY surface conditions (Annex 14, Vol. I, Chap. 3)	Venezuela, VALENCIA, Valencia Intl. Airport	Premature asphalt runway surface deterioration due to marking painting		IATA Report of the Venezuela Airport Operational Assessment, March 05-08, 2001*	B	Remove painting. Repair damaged area. Repaint marks with water emulsion base paint "PENDING ACTION PLAN" ACTION PLAN: Scheduled starting runway overlay in OCT07 (IP/31-GREPECAS-14/16-20 APR07)	Venezuela	DEC/ 2007	
AGA 79 SAM	TWY surface conditions (Annex 14, Vol. I, Chap. 3)	Venezuela, MARGARITA, Margarita Intl. Airport	Parallel taxiway pavement presents unsealed cracks, with some vegetation growth		IATA Report of the Venezuela Airport Operational Assessment, March 05-08, 2001*	B	Do maintenance for the parallel taxiway "PENDING ACTION PLAN"	Venezuela		
AGA 84 SAM	Visual aids (Annex 14, Vol. I, Chap. 5 and ANP, Table AOP)	Venezuela, VALENCIA/Valencia Intl. Airport	The parking stands do not contain apron safety lines		IATA Report of the Venezuela Airport Operational Assessment, March 05-08, 2001*	A	Paint the apron safety lines "PENDING ACTION PLAN"	Venezuela		
AGA 90 SAM	Fencing (Annex 14, Vol. I, Chap. 8.4)	Venezuela, VALENCIA, Valencia Intl. Airport	Opening and/or damaged fencing along the airport perimeter		IATA Report of the Venezuela Airport Operational Assessment, March 05-08, 2001*	A	Correct the areas where the fencing is missing/damaged "PENDING ACTION PLAN" ACTION PLAN: Correction started in FEB07 and there is a continuous checking-up (Ip/31-GREPECAS-14/16-20 ApR07)	Venezuela	DEC/ 2007	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 97 SAM	Bird Strike Hazard (Annex 14, Vol. I, Chap.9.5)	Venezuela, MARGARITA, Margarita Intl. Airport	Birds were observed within the perimeter of the airport		IATA Report of the Venezuela Airport Operational Assessment, March 05-08, 2001*	A	Create a National Bird Strike Committee and establish a wild life program "PENDING ACTION PLAN" ACTION PLAN: National Committee scheduled to be created during the 2nd semester 2007 (IP/31-GREPECAS-14/16-20 APR07)	Venezuela	DEC/ 2007	
AGA 127 SAM	RWY surface conditions (Annex 14, Vol. I, Chap. 3)	Venezuela, MARACAIBO/La Chinita	RWY 09 requires grooving on first 1000 m	MAY/ 2002	IFALPA Annex 19 Part 3 19-3-SAM-1	B	Correct the problem, evaluating different alternatives "PENDING ACTION PLAN" ACTION PLAN: Scheduled overlay begining in OCT07 (IP/31-GREPECAS-14/16-20 APR07)	Venezuela	DEC/ 2007	
AGA 128 SAM	Apron Physical and Surface Characteristics (Annex 14, Vol. I, Chap. 3, 9, Doc 9476, Doc 9157 - Part 2)	Venezuela, BARCELONA/Barcelona Intl. Airport	Apron inadequate for number of aircraft	MAY/ 2002	IFALPA Annex 19 Part 3 19-3-SAM-1	A	Adequate/manage apron for accommodate number of aircraft "PENDING ACTION PLAN" ACTION PLAN: There is a plan do enlarge the apron area, starting from June 2007 (IP/31-GREPECAS-14/16-20 ABR07)	Venezuela		
AGA 129 SAM	Apron Physical and Surface Characteristics (Annex 14, Vol. I, Chap. 3, 9, Doc 9476, Doc 9157 - Part 2)	Venezuela, MAIQUETIA/Simon Bolivar	Apron surface very uneven	MAY/ 2002	IFALPA Annex 19 Part 3 19-3-SAM-1	B	Evaluate the causes of unevenness and fix it "PENDING ACTION PLAN"	Venezuela		
AGA 130 SAM	Visual aids (Annex 14, Vol. I, Chap. 5)	Venezuela, MAIQUETIA/Simon Bolivar	No VASIS or PAPI on RWY 27	MAY/ 2002	IFALPA Annex 19 Part 3 19-3-SAM-1	A	Provide PAPI at RWY 27 "PENDING ACTION PLAN"	Venezuela		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 390 SAM	Annex 14, Vol. I, Ch. 9	VENEZUELA/INAC	No Bird/Wildlife Hazard Prevention Committee	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/02 of its respective Report)	A	Create a National Bird/Wildlife Hazard Prevention Committee "PENDING ACTION PLAN" ACTION PLAN: Scheduled implementation between 01 MAR and 31 DEC 05 (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05). Rescheduled for JUN 07 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	JUN/ 2007	
AGA 391 SAM	Annex 14, Vol. I, Attach. A	VENEZUELA/INAC	No adequate equipment for friction coefficient measurements	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/03 of its respective Report)	A	Acquire a continuous friction measuring device "PENDING ACTION PLAN" ACTION PLAN: Scheduled to be acquired between 07 JAN 05 and 30 JUN 06 (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for JUN 07 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	JUN/ 2006	
AGA 394 SAM	Doc 8733, FASID CAR/SAM-AOP	VENEZUELA/INAC/Barcelona	RFF CAT 7	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/06 of its respective Report)	A	Upgrade RFF to CAT 9 "PENDING ACTION PLAN" ACTION PLAN: Scheduled to be acquired (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for DEC 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	NOV/ 2006	
AGA 395 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/Barcelona	No parallel TWY to RWY 15	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/07 of its respective Report)	B	Construct parallel TWY to RWY 15 "PENDING ACTION PLAN" ACTION PLAN: Resources designation will be required (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for DEC 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	DEC/ 2006	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 396 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/Barcelona	No PAPI for RWY 33	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/08 of its respective Report)	B	Install PAPI for RWY 33 "PENDING ACTION PLAN" ACTION PLAN: Acquisition, installation and PAPI evaluation planned (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for JUL 07 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	DEC/ 2006	
AGA 398 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/Caracas	No PAPI for RWY 28	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/10 of its respective Report)	B	Install PAPI for RWY 28 "PENDING ACTION PLAN" ACTION PLAN: Acquisition, installation and PAPI evaluation planned (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for JUL 07 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	DEC/ 2006	
AGA 399 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/Maracaibo	No PAPI for RWY 27/R	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/11 of its respective Report)	B	Install PAPI for RWY 27/R "PENDING ACTION PLAN" ACTION PLAN: Acquisition, installation and PAPI evaluation planned (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for JUL 07 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	DEC/ 2006	
AGA 400 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/Margarita	RFF CAT 7	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/12 of its respective Report)	A	Upgrade RFF to CAT 9 "PENDING ACTION PLAN" ACTION PLAN: Upgrade planned (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for DEC 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	NOV/ 2006	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 401 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/Margarita	No TWY edge lighting	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/13 of its respective Report)	B	Install TWY edge lighting "PENDING ACTION PLAN" ACTION PLAN: Reparations and installation planned (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for DEC 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	DEC/ 2006	
AGA 402 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/Margarita	No PAPI for RWY 27	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/14 of its respective Report)	B	Install PAPI for RWY 27 "PENDING ACTION PLAN" ACTION PLAN: Acquisition, installation and PAPI evaluation planned (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for JUL 07 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	JUN/ 2006	
AGA 404 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/Paraguana	RFF CAT 5	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/16 of its respective Report)	A	Update RFF to CAT 6 "PENDING ACTION PLAN" ACTION PLAN: CAT 6 planned (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for DEC 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	DEC/ 2006	
AGA 405 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/S. A. del Táchira	RWY designation 17/34	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/17 of its respective Report)	B	Officially inform correct designation (RWY 18/35) "PENDING ACTION PLAN" ACTION PLAN: Official communication will be sent to the SAM Office (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for DEC 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	DEC/ 2006	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 407 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/S. A. del Táchira	RWY 17 is NINST	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/19 of its respective Report)	B	Provide RWY 17 as NPA "PENDING ACTION PLAN" ACTION PLAN: Planned provision of RWY 17 as NPA (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for NOV 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	DEC/ 2006	
AGA 408 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/Valencia	RWY 28 is NINST	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/20 of its respective Report)	A	Provide RWY 28 as NPA "PENDING ACTION PLAN" ACTION PLAN: Planned provision of RWY 28 as NPA (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for JUN 07 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	DEC/ 2006	
AGA 409 SAM	Doc 8733, FASID CAR/SAM – AOP	VENEZUELA/INAC/Valencia	No PAPI for RWY 28	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/21 of its respective Report)	B	Install PAPI for RWY 28 "PENDING ACTION PLAN" ACTION PLAN: SAM Office will be officialy notified (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for JUL 07 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	DEC/ 2006	
AGA 410 SAM	Annex 14, Vol. I, Sec. 9.3	VENEZUELA/INAC/All aiports	No disabled aircraft removal plans for int´l airports	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/22 of its respective Report)	B	Develop disabled aircraft removal plans for int´l airports "PENDING ACTION PLAN" ACTION PLAN: All the international airports will be required to present their plans (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for JUN 07 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC	DEC/ 2006	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 411 SAM	Doc 9184-AN/902, Parts 1 & 2	VENEZUELA/INAC/IA AIM	No Airport Engineering Department	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/23 of its respective Report)	B	Structure an Airport Engineering Department "PENDING ACTION PLAN" ACTION PLAN: Planned the creation of the Airport Engineering Department (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC/IAAIM	NOV/ 2006	
AGA 412 SAM	Annex 14, Vol. I, Sec. 9.3	VENEZUELA/INAC/IA AIM	No disabled aircraft removal plan	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/24 of its respective Report)	B	Develop disabled aircraft removal plan "PENDING ACTION PLAN" ACTION PLAN: The plan will be finalized as it is scheduled in the Aerodrome Operations Manual (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for DEC 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC/IAAIM	SEP/ 2005	
AGA 417 SAM	Annex 14, Vol. I, Ch. 1, Sec. 1.4	VENEZUELA/INAC/IA AIM	The airport is not certified yet	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/29 of its respective Report)	B	Comply with Section 1.4 of Annex 14, Vol. I "PENDING ACTION PLAN" ACTION PLAN: It wil be complied as soon as the Venezuelan Aeronautical Regulations be published (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for MAR 07 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC/IAAIM	DEC/ 2005	
AGA 418 SAM	Annex 14, Vol. I, Ch. 3, Sec. 3.5	VENEZUELA/INAC/IA AIM	No RESA for RWY 10	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/30 of its respective Report)	A	Provide RESA for RWY 10 "PENDING ACTION PLAN" ACTION PLAN: Scheduled evaluation together with IAAIM during the certification process (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC/IAAIM	MAR/ 2007	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 421 SAM	Annex 14, Vol. I, Ch. 10	VENEZUELA/INAC/IAAIM	No joint seal between apron slabs	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/33 of its respective Report)	B	Provide sealing of apron slabs joints "PENDING ACTION PLAN" ACTION PLAN: A survey will be carried out for planning the joint sealing (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for NOV 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC/IAAIM	NOV/ 2006	
AGA 423 SAM	Annex 14, Vol. I, Ch. 10	VENEZUELA/INAC/IAAIM	TWYs with pavement desegregation, distressed, vegetation in the cracks	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/35 of its respective Report)	A	Prepare project/design for TWYs maintenance/ rehabilitation "PENDING ACTION PLAN" ACTION PLAN: Pavement studies will be carried out for establishing a preventive/corrective maintenance program (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for DEC 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC/IAAIM	SEP/ 2006	
AGA 425 SAM	Annex 14, Vol. I, Ch. 3, Sec. 3.5	VENEZUELA/INAC/IAAIM	RESA at RWY 28 is unlevelled	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/37 of its respective Report)	A	Level RESA at RWY 28 "PENDING ACTION PLAN" ACTION PLAN: Evaluation will be carried out and corrective actions will be taken (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for MAR 07 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC/IAAIM	JUL/ 2006	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AGA 426 SAM	Annex 14, Vol. I, Ch. 4	VENEZUELA/INAC/IAAIM	6 rigid columns as base for ILS localizer after RWY 28	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/38 of its respective Report)	A	Provide frangible base for ILS localizer after RWY 28 "PENDING ACTION PLAN" ACTION PLAN: Acquisition, installation and ILS evaluation will be done (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for DEC 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC/IAAIM	MAR/ 2006	
AGA 428 SAM	Annex 14, Vol. I, Ch. 4	VENEZUELA/INAC/IAAIM	Open trapezoidal canal (3 m x 6 m x 1.5 m deep) on the RWY strip	DEC/ 2004	ICAO regular mission (06-09 DEC 2004, Recommended Action AGA/40 of its respective Report)	B	Provide a closing system for the trapezoidal canal on the RWY strip "PENDING ACTION PLAN" ACTION PLAN: A report with a recommendation for providing a closing system for the canal will be presented (DOC PRE 704.05 - 06 APR 05) - (DOC PRE 4593.05 de 20 DEC 05) Rescheduled for DEC 06 (DOC PRE-ORAC-4143-06, 26 SEP 06)	INAC/IAAIM	JUL/ 2006	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
ARG Argentina										
AIS 15 SAM	ICAO Annex 4; Annex 15, Para. 3.6.4.1 and 3.6.4.2. WGS-84.Geodetic System	Argentina	Lack of total implementation of the WGS-84 system, mainly concerning requirements as the publication of the geoid undulation as it is required.		SAM RO records.	A	# Action Plan (2006) indicated that relevant action is being taken on the matter. Implementation 70%	Indicated State		Completion date: TBD
AIS 60 SAM	Annex 4, 17; Cap. 17.1. VFR aeronautical chart (Scale, 1:500,000)	Argentina	Need for production of this serie of ICAO chart under the WGS-84 system to satisfy the lack of production of the WAC aeronautical chart.		SAM Office records.	B	It is indicated in action plan (2005) that implementation of this requirement is under progress. 20% advance.	Indicated State.	DEC/ 2013	2008: As expressed in the last action plan, the implementation of this requirement is in progress. An analysis of distribution of sheets was made, and the results were that in order to cover in chart scale 1:500.000 Argentina needs 40 sheets, two were produced and the third one is in advanced phase. Percentage made 6%.
AIS 65 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrumens approach charts.	Argentina	Need to complete the inclusion of the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of all instrument approach charts - OACI.		SAM Office records.	A	1. # It is indicated in action plan (2006) that this requirement has been satisfied as required. 2. Relief countours lines in blacK. 80% of compliance.	Indicated State		
AIS 95 SAM	Annex 4, Chap 13, Para 13.6.1 C). Aerodrome/Heliport Chart - ICAO.	Argentina	Need for the inclusion of geoid undulation in the Aerodrome/Heliport Chart - ICAO.		SAM OfficeRecords.	A	Action Plan (2006) 90% implemented. Geoidal undulation data published in the AIP for all airports.	Indicated State	NOV/ 2008	In AMD 03/08 it is expected that this data will be included in aerodrome/helicopter ICAO Type charts.
AIS 162 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Argentina	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rules are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	It is indicated in the action Plan (2006) that relevant actions on the matter, are being taken as required. Internal auditories are carried out at the AIS.	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
AIS 178 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Argentina	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	1. # implementation Plan (2006) indicated that relevant action is being taken on the matter. 2.Quality assurance system required is under development.	Indicated States	DEC/ 2010	2008: In the current organization of the AIS Department, implemented in February 2008, the AIS Quailty Management Division was created, which first objectives were: 1) implement the AIS procedural manual (completed), 2) develop de AIS quality manual (in process, developed to 10%), and 3) implement the AIS quality management system (in initial planning and conceptual stage).
AIS 219 SAM	CAR-SAM ANP Part VIII (AIS); Para. 65, 66, 67, 68 AND 69. Regional AIS automated system	Argentina	Requirement for implementation of automated system at the AIS services, in agreement with the indicated in the CAR/SAM Air Navigation Plan.		Records SAM Office.	A	1. # Action Plan (2006) indicated that relevant proposed system is under development.	Indicated State	DEC/ 2012	2008: To date, the automation date of aircraft movement table, which data base enables to supervise information on pilots, aircraft and aerodromes as part of the automation required.
BOL Bolivia										
AIS 36 SAM	Annex 15; 3.6.1 English language	Bolivia	Requirement to use English for plain language texts in AIS publications		SAM RO Records..	A	Action Plan (2006) AIS staff is under training 20% implemented	Indicated State.		
AIS 46 SAM	ICAO Annex 4, Chapter 2.8; Chapter 16, Appendix 5. World Aeronautical Chart	Bolivia	Lack of compliance with the requirement for production of the world aeronautical chart (WAC, Scale; 1:1,000,000) , according with the sheets distribution as it is established by ICAO to this serie of chart. Not production of this serie of chart with ICAO specification and under the WGS-84 system.		SAM Office records.	B	Action Plan (2006)	Indicated State.		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 52 SAM	Annex 4, 17; Cap. 17.1 VFR aeronautical chart (Scale, 1:500,000)	Bolivia	Need for production of this serie of ICAO chart under the WGS-84 system to satisfy the lack of production of the WAC aeronautical chart.		SAM Office records.	B	Action Plan (2006)	Indicated State.		
AIS 66 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrumens approach charts.	Bolivia	Need to complete the inclusion of the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of all instrument approach charts - OACI.		SAM Office records.	A	Action Plan (2006) 20% implemented	Indicated State		
AIS 76 SAM	ICAO Annex 4, Chapter 3. Aerodrome Obstacle Chart - ICAO, Type A.	Bolivia	Need for effective production of Aerodrome Obstacle Chart - ICAO, Type A., concerning the following airport: La Paz/El Alto, Tarija, Puerto Suarez, Viru Viri y Yacuiba.		SAM Office records.	A	I action Plan (2006) 30% implemented	Indicated State		
AIS 96 SAM	Annex 4, Chap 13, Para 13.6.1 C). Aerodrome/Heliport Chart - ICAO.	Bolivia	Need for the inclusion of geoid undulation in the Aerodrome/Heliport Chart - ICAO.		SAM OfficeRecords.	A	Action Plan (2006) 40% implemented	Indicated State		
AIS 108 SAM	ICAO Annex 15, Chapter 8; Doc 8733 ANP, Part VI, Para. 26. Pre-flight Information Bulletins (PIB)	Bolivia	Need for effective implementation in the provision of pre-flight bulletins (PIB) in all the designated aerodromes as it is indicated in FASID Table AIS 1; and maily with respect to the provision of users with an automated system integrating PIB/MET/FPL products.		SAM Office records.	A	Action Plan (2006) 90% implemented	Indicated State		
AIS 163 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Bolivia	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and ruels are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	I action Plan (2006) working are being carried out on the matter.	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 179 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Bolivia	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action Plan (2006).	Indicated States		
AIS 196 SAM	Annex 15, Cap 8.3.1; Doc 8733 ANP, Parte VI, Para. 28 Post-flight Information Service	Bolivia	Need for effective coordination between the AIS, ATS and users for the effective level of compliance with this requirement.		Records SAM Office.	A	Action Plan (2006) 80% implemented	Indicated State		
AIS 220 SAM	CAR-SAM ANP Part VIII (AIS); Para. 65, 66, 67, 68 AND 69. Regional AIS automated system	Bolivia	Requirement for implementation of automated system at the AIS services, in agreement with the indicated in the CAR/SAM Air Navigation Plan..		Records SAM Office.	A	Action Plan (2006) 10% implemented	Indicated State		
BRA Brasil										
AIS 61 SAM	Annex 4, 17; Cap. 17.1. VFR aeronautical chart (Scale, 1:500,000)	Brazil/Brasil	Need for production of this serie of ICAO chart under the WGS-84 system to satisfy the lack of production of the WAC aeronautical chart.		SAM Office records.	B	# iIt is indicated in action plan (2005), Implementation is in progress.	Indicated State.		
AIS 67 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrumens approach charts.	Brazil	Need to complete the inclusion of the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of all instrument approach charts - OACI.		SAM Office records.	A	# It is indicated in action plan (2004) that required actions should be taken.	Indicated State		
AIS 97 SAM	Annex 4, Chap 13, Para 13.6.1 C). Aerodrome/Heliport Chart - ICAO.	Brazil	Need for the inclusion of geoid undulation in the Aerodrome/Heliport Chart - ICAO.		SAM OfficeRecords.	A	# In action plan (2004) it is indicated that measures should be taken as required.	Indicated State		
AIS 100 SAM	ICAO Annex 4, Chapter 7;Par. 7.6.2 Enroute Navigation Charts - ICAO.	Brazil/Brasil	Need to include the Area Minimun Altitude (AMA) in the ICAO Enroute Charts - ICAO .		SAM Office records	A	1. Need to include AMA in ICAO en-route charts. # Action plan is required.	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 149 SAM	Annex 15, Para. 5.2.13.3. NOTAM Summary	Brazil	Need to effective comply with the international distribution of monthly printed plain-language list of NOTAM valid.		SAM Office records.	A	Action Plan (2004).	Indicated State		
AIS 158 SAM	ICAO Annex 4; Annex 15, Para. 3.6.4.1 and 3.6.4.2. WGS-84 system	Brasil	Lack of total implementation of the WGS-84 system, mainly concerning requirements as the survey of all required obstacles data, coordination of the geographical coordinates at the boundaries of common FIRs, and the publication of the geoid undulation as it is required.		SAM RO records.	A	1.Action Plan (2004) 2. Survey for obstruction data finished WGS-84 coordinates at the FIR coordinated with adjacent States Remain lack of publication on geoid undulation	Indicated State		
AIS 164 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Brazil	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rules are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	Action Plan 2004. Ongoing	Indicated State		
AIS 180 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Brazil	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action Plan (2004). Ongoing	Indicated States		
CHL Chile										
AIS 1 SAM	ICAO Annex 15, Chapter 4; [Appendix 1, ENR 6 and AD 2.24]. Restructured AIP AIP English version	Chile	Need to issue the AIP document under a restructured format. [It is required that Enroute chart be included in AIP/ENR 6 section; and that all aeronautical charts related with the international airports, be also included in section AIP/AD 2.24.		SAM Office records.	A	Implementation Plan (2006) AIP English version 25%	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 17 SAM	ICAO Annex 4; Annex 15, Para. 3.6.4.1 and 3.6.4.2. WGS-84.Geodetic System	Chile	Lack of total implementation of the WGS-84 system, mainly concerning requirements as the publication of the geoid undulation as it is required.		SAM RO records.	A	Implementation Plan (2006) Geoid undulation data are notyet issued	Indicated State		
AIS 47 SAM	ICAO Annex 4, Chapter 2.8; Chapter 16, Appendix 5. World Aeronautical Chart	Chile	Lack of compliance with the requirement for production of the world aeronautical chart (WAC, Scale; 1:1,000,000) , according with the sheets distribution as it is established by ICAO to this serie of chart. Not production of this serie of chart with ICAO specification and under the WGS-84 system.		SAM Office records.	B	Action Plan (2006)	Indicated State.		
AIS 62 SAM	Annex 4, 17; Cap. 17.1. VFR aeronautical chart (Scale, 1:500,000)	Chile	Need for production of this serie of ICAO chart under the WGS-84 system to satisfy the lack of production of the WAC aeronautical chart.		SAM Office records.	B	Action plan (2006) WGS-84 System applied in 30%	Indicated State.		
AIS 68 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrumens approach charts.	Chile	Need to complete the inclusion of the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of all instrument approach charts - OACI.		SAM Office records.	A	In action plan (2006) it is indicated that topographic is not shown in this chart, and that difference is indicated.	Indicated State		
AIS 101 SAM	ICAO Annex 4, Chapter 7;Par. 7.6.2 Enroute Navigation Charts - ICAO.	Chile	Need to include the Area Minimun Altitude (AMA) in the ICAO Enroute Charts - ICAO .		SAM Office records	A	# It is indicated in action plan (2006) that no AMA data is included in this chart, and that difference will be issued.	Indicated State		
AIS 131 SAM	Annex 4, Chap 13, Para 13.6.1 C). Aerodrome/Heliport Chart - ICAO.	Chile	Requirement to effectively satisfy the specification on the inclusion of geoid undulation in the Aerodrome/Heliport Chart - ICAO.		Records SAM Office.	A	It is indicated in Action Plan (2006) that difference with respect to the ICAO Annex 4 has been reprted.	Indicated State		
AIS 152 SAM	Annex 15, Para. 5.2.2.1. Use of English languaje in NOTAM.	Chile	Need of use of English languaje for those parts of the NOTAM requiring text in plain languaje (Appendix 6, 8 Item E).		SAM Office records.	A	The implementation Plan (2006) 25% implemented	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 154 SAM	Annex 15, Para. 5.2.13.3. NOTAM Summary	Chile	Need to effective comply with the international distribution of monthly printed plain-language list of NOTAM valid.		SAM Office records.	A	The implementation Plan (2006) Not applicable	Indicated State		
AIS 165 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Chile	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rules are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	Action Plan 2006. 50% implemented	Indicated State		
AIS 181 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Chile	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action Plan 2006.	Indicated States		
COL Colombia										
AIS 8 SAM	ICAO Annex 15, Para. 3.4.4. 1 y 3.4.4. 2. WGS-84.Geodetic System	Colombia	Need to complete the implementation of the WGS-84 system, mainly with respect to the publication of the geoid undulation as it is required.		SAM RO Records..	A	Action Plan (2006) relevant action is being taken on the matter 90% implemented	Indicated State		
AIS 18 SAM	ICAO Annex 4. WGS-84.Geodetic System	Colombia.	Need for production of all required aeronautical charts under the WGS-84 systemmainly the aerodrome/heliport charts with the geoid undulation as it is required..		SAM RO records.	A	Action Plan (2006) action is being taken on the matter 70% implemented	Indicated State		
AIS 28 SAM	ICAO Annex 15, Chapter 6; ANP (Doc. 8733) Par. 46 - 49. Sistema AIRAC.	Colombia	Need for an effective implementation of AIRAC requirements.		SAM RO Records.	A	# Implementation Plan (2004) indicated that relevant action is being taken on the matter.	Indicated State		
AIS 37 SAM	Annex 15; 3.6.1 English language	Colombia	Requirement to use English for plain language texts in AIS publications		SAM RO Records..	A	Action Plan (2006) action is being taken on the matter 40% implemented	Indicated State.		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 48 SAM	ICAO Annex 4, Chapter 2.8; Chapter 16, Appendix 5. World Aeronautical Chart	Colombia	Lack of compliance with the requirement for production of the world aeronautical chart (WAC, Scale; 1:1,000,000) , according with the sheets distribution as it is established by ICAO to this serie of chart. Not production of this serie of chart with ICAO specification and under the WGS-84 system.		SAM Office records.	B	Action plan (2006) that adquisition of a digital cartography and geographic information systems should be adquired.	Indicated State.		
AIS 53 SAM	Annex 4, 17; Cap. 17.1. VFR aeronautical chart (Scale, 1:500,000)	Colombia	Need for production of this serie of ICAO chart under the WGS-84 system to satisfy the lack of production of the WAC aeronautical chart.		SAM Office records.	B	Action plan (2006) that adquisition of a digital cartography and geographic information systems should be adquired.	Indicated State.		
AIS 69 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrumens approach charts.	Colombia	Need to complete the inclusion of the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of all instrument approach charts - OACI.		SAM Office records.	A	Action plan (2006) that adquisition of a digital cartography and geographic information systems should be adquired.	Indicated State		
AIS 99 SAM	ICAO Annex 4, Chapter 7;Par. 7.6.2 Enroute Navigation Charts - ICAO.	Colombia	Need to include the Area Minimun Altitude (AMA) in the ICAO Enroute Charts - ICAO .		SAM Office records	A	Action plan (2006).	Indicated State		
AIS 110 SAM	ICAO Annex 15, Chapter 8; Doc 8733 ANP, Part VI, Para. 26 Pre-flight Information Bulletins (PIB).	Colombia	Need for effective implementation in the provision of pre-flight bulletins (PIB) in all the designated aerodromes as it is indicated in FASID Table AIS 1; and maily with respect to the provision of users with an automated system integrating PIB/MET/FPL products.		SAM Office records.	A	Action Plan (2006) action is being taken on the matter.	Indicated State		
AIS 126 SAM	Annex 15, Chap 8.3.1; Doc 8733 ANP, Parte VI, Para. 28 Post-flight Information Service	Colombia	Need for effective coordination between the AIS, ATS and users for the effective level of compliance with this requirement.		Records SAM Office.	A	Action Plan (2006 action is being taken on the matter. 20% implemented	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 132 SAM	Annex 4, Chap 13, Para 13.6.1 C). Aerodrome/Heliport Chart - ICAO.	Colombia	Requirement to effectively satisfy the specification on the inclusion of geoid undulation in the Aerodrome/Heliport Chart - ICAO.		Records SAM Office.	A	Action Plan (2006) 20% implemented.	Indicated State		
AIS 147 SAM	Annex 15, Para. 5.2.2.1. Use of English languaje in NOTAM.	Colombia	Need of use of English languaje for those parts of the NOTAM requiring text in plain language (Appendix 6, 8 Item E).		SAM Office records.	A	Action Plan (2006) action is being taken on the matter. 40% implemented	Indicated State		
AIS 166 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Colombia	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rules are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	Action Plan 2006. 30% implemented	Indicated State		
AIS 182 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Colombia	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action Plan (2006) action is being taken on the matter.	Indicated States		
ECU Ecuador										
AIS 49 SAM	ICAO Annex 4, Chapter 2.8; Chapter 16, Appendix 5. World Aeronautical Chart	Ecuador	Lack of compliance with the requirement for production of the world aeronautical chart (WAC, Scale; 1:1,000,000) , according with the sheets distribution as it is established by ICAO to this serie of chart. Not production of this serie of chart with ICAO specification and under the WGS-84 system.		SAM Office records.	B	Action plan 2006. Only the VFR chart (Scale, 1:500,000) is produced to cover the national territory and jurisdictional waters. WAC, 50% implemented	Indicated State.		
AIS 133 SAM	Annex 4, Chap 13, Para 13.6.1 C). Aerodrome/Heliport Chart - ICAO.	Ecuador	Requirement to effectively satisfy the specification on the inclusion of geoid undulation in the Aerodrome/Heliport Chart - ICAO.		Records SAM Office.	A	Action plan 2006 80% implemented	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 135 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrument Approach Charts - OACI.	Ecuador	Need to include the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of instrument approach charts - OACI.		Records SAM Office.	A	Action plan 2006 90% implemented	Indicated State		
AIS 156 SAM	Annex 15, Para. 5.2.2.1. Use of English languaje in NOTAM.	Ecuador	Need of use of English languaje for those parts of the NOTAM requiring text in plain languaje (Appendix 6, 8 Item E).		SAM Office records.	A	Action Plan 2006. 50% implemented.	Indicated State		
AIS 167 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Ecuador	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rulles are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	Action plan 2006 30% implemented	Indicated State		
AIS 183 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Ecuador	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action plan 2006.	Indicated States		
AIS 198 SAM	Annex 15, Cap 8.3.1; Doc 8733 ANP, Parte VI, Para. 28 Post-flight Information Service	Ecuador	Need for effective coordination between the AIS, ATS and users for the effective level of compliance with this requirement.		Records SAM Office.	A	Action plan 2006. 30% implemented.	Indicated State		
AIS 232 SAM	Annex 15; 3.6.1 English language	Ecuador	Requirement to use English for plain language texts in AIS publications		SAM RO Records..	A	Action plan 2005. 50% implemented.	Indicated State.		
GUY Guyana										
AIS 54 SAM	Annex 4, 17; Cap. 17.1. VFR aeronautical chart (Scale, 1:500,000)	Guyana	Need for production of this serie of ICAO chart under the WGS-84 system to satisfy the lack of production of the WAC aeronautical chart.		SAM Office records.	B	Action plan (2004) required actions should be taken.	Indicated State.		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 70 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrumens approach charts.	Guyana	Need to complete the inclusion of the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of all instrument approach charts - OACI.		SAM Office records.	A	Action plan (2004. 50% implemented.	Indicated State		
AIS 105 SAM	ICAO Annex 4, Chapter 7;Par. 7.6.2 Enroute Navigation Charts - ICAO.	Guyana	Need to produce and include in the AIP the Enroute Charts - ICAO, also including the required Area Minimun Altitude (AMA) in such serie of charts.		SAM Office records	A	Action plan 2004. 50% implemented.	Indicated State		
AIS 127 SAM	Annex 15, Chap 8.3.1; Doc 8733 ANP, Parte VI, Para. 28 Post-flight Information Service	Guyana	Need for effective coordination between the AIS, ATS and users for the effective level of compliance with this requirement.		Records SAM Office.	A	Action Plan 2004 90% implemented.	Indicated State		
AIS 134 SAM	Annex 4, Chap 13, Para 13.6.1 C). Aerodrome/Heliport Chart - ICAO.	Guyana	Requirement to effectively satisfy the specification on the inclusion of geoid undulation in the Aerodrome/Heliport Chart - ICAO.		Records SAM Office.	A	Action Plan 2004 50% implemented.	Indicated State		
AIS 169 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Guyana	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rules are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	Action plan 2004 action should be taken as required	Indicated State		
AIS 185 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Guyana	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action plan 2004 action should be taken as required	Indicated States		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 212 SAM	ANP Para. 11, 16, 17, 18 AND 19 Training of AIS personel.	Guyana	Need for an effective level of training of the AIS personel according to the stated by the CAR/SAM Air Navigation Plan, Part VIII (AIS/MAP), in agreement with a regular quality assurance program; and granted the AIS staff with a corresponding certificate of compentence equal to an AIS licence.		Records SAM Office.	A	Action Plan 2004 70% implemented.	Indicated State		
AIS 225 SAM	CAR-SAM ANP Part VIII (AIS); Para. 65, 66, 67, 68 AND 69. Regional AIS automated system	Guyana	Requirement for implementation of automated system at the AIS services, in agreement with the indicated in the CAR/SAM Air Navigation Plan..		Records SAM Office.	A	Action Plan 2004 20% implemented.	Indicated State		
PAN Panama										
AIS 41 SAM	ANNEX 15 , Chap. 8; Doc 8733 ANP, Par. 20; FASID,Table AIS-1 Implementation of required AIS aerodrome units.	Panama	Need for effective implementation of AIS aerodrome units (David, Bocas del Toro and Changuinola) as required by the FASID,Table AIS-1.		Records SAM Office.	A	Action Plan (2006).	Indicated State.		
AIS 50 SAM	ICAO Annex 4, Chapter 2.8; Chapter 16, Appendix 5. World Aeronautical Chart	Panama	Lack of compliance with the requirement for production of the world aeronautical chart (WAC, Scale; 1:1,000,000) , according with the sheets distribution as it is established by ICAO to this serie of chart. Not production of this serie of chart with ICAO specification and under the WGS-84 system.		SAM Office records.	B	Action plan 2006 VFR aeronautical chart (Scale, 1:500,000) is produced to cover the national territory and jurisdictional waters.	Indicated State.		
AIS 71 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrumens approach charts.	Panama	Need to complete the inclusion of the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of all instrument approach charts - OACI.		SAM Office records.	A	# Implementation Plan (2002) indicated that relevant action is being taken on the matter.	Indicated State		

OUTSTANDING DEFICIENCIES

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

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1	2	3	4	5	6	7	8	9	10	11
AIS 77 SAM	ICAO Annex 4, Chapter 3. Aerodrome Obstacle Chart - ICAO, Type A.	Panama	Need for effective production of Aerodrome Obstacle Chart - ICAO, Type A., concerning the following airport: Marcos Gelabert, Enrique Malek y Bocas del Toro..		SAM Office records.	A	Action plan 2006 Will be completed during 2007.	Indicated State		
AIS 137 SAM	ICAO Annex 4, Chapter 7;Par. 7.6.2 Enroute Navigation Charts - ICAO.	Panama	Need to produce and include in the AIP the Enroute Charts - ICAO, also including the required Area Minimun Altitude (AMA) in such serie of charts.		Records SAM Office.	A	Action plan (2006) Action is being taken.	Indicated State		
AIS 170 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Panama	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rules are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	Action plan 2006 Action is being taken.	Indicated State		
AIS 186 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Panama	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action plan 2006 Action is being taken.	Indicated States		
AIS 199 SAM	Annex 15, Cap 8.3.1; Doc 8733 ANP, Parte VI, Para. 28 Post-flight Information Service	Panama	Need for effective coordination between the AIS, ATS and users for the effective level of compliance with this requirement.		Records SAM Office.	A	Action Plan (2006) During 2007.	Indicated State		
AIS 213 SAM	ANP Para. 11, 16, 17, 18 AND 19 Training of AIS personel.	Panama	Need for an effective level of training of the AIS personel according to the stated by the CAR/SAM Air Navigation Plan, Part VIII (AIS/MAP), in agreement with a regular quality assurance program; and granted the AIS staff with a corresponding certificate of compentence equal to an AIS licence.		Records SAM Office.	A	Action plan 2006 During 2006 - 2007	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 226 SAM	CAR-SAM ANP Part VIII (AIS); Para. 65, 66, 67, 68 AND 69. Regional AIS automated system	Panama	Requirement for implementation of automated system at the AIS services, in agreement with the indicated in the CAR/SAM Air Navigation Plan..		Records SAM Office.	A	Action Plan (2006) Ongoing	Indicated State		
PER Peru										
AIS 12 SAM	ICAO Annex 15, Para. 3.4.4. 1 y 3.4.4. 2. WGS-84.Geodetic System	Peru	Need to complete the implementation of the WGS-84 system, mainly with respect to the survey of all required obstacles data, effective coordination on the geographical coordinates at the boundaries of common FIRs and the publication of the geoid undulation as required. a) Obstacle data: In 2008 de upating of obstacle data and geographical coordinateswill be re-initiated. Termination date 2009. b)Geographical coordinates of transference points in the FIR boundaries and adjacent FIRs have been coordinated and completed in 2006. c) geoid undulation: no plans at short term.	JAN/ 2008	SAM RO Records	A	Action Plan (2006) 90% implemented	Indicated State	2009	
AIS 39 SAM	Annex 15; 3.6.1 English language	Peru	Requirement to use English for AIP.	JUL/ 2008	SAM RO Records..	A	Action Plan (2006) 15% implemented.	Indicated State.	DEC/ 2009	
AIS 42 SAM	ANNEX 15 , Chap. 8; Doc 8733 ANP, Par. 20; FASID,Table AIS-1 Implementation of required AIS aerodrome units	Peru	Need for effective implementation of AIS aerodrome units (Pisco) as required by the FASID,Table AIS-1. An AIS unit has been implemented at Pisco aerodrome with personnel having AIS licensing.		Records SAM Office.	A	Action plan (2006) 80% implemented.	Indicated State.	DEC/ 2008	
AIS 56 SAM	Annex 4, 17; Cap. 17.1. VFR aeronautical chart (Scale, 1:500,000)	Peru	Need for production of this serie of ICAO chart under the WGS-84 system to satisfy the lack of production of the WAC aeronautical chart.		SAM Office records.	B	Action plan (2006).	Indicated State.	DEC/ 2012	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 73 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrumens approach charts.	Peru	Need to complete the inclusion of the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of all instrument approach charts - OACI.		SAM Office records.	A	Action Plan (2006) 40% implemented.	Indicated State	DEC/ 2010	
AIS 78 SAM	ICAO Annex 4, Chapter 3. Aerodrome Obstacle Chart - ICAO, Type A.	Peru	Need for effective production of Aerodrome Obstacle Chart - ICAO, Type A., concerning the following airport: Arequipa, Chiclayo, Iquitos, Cusco, y Talara.		SAM Office records.	A	Action plan (2006) 30% implemented.	Indicated State	DEC/ 2010	
AIS 114 SAM	ICAO Annex 15, Chapter 8; Doc 8733 ANP, Part VI, Para. 26. Pre-flight Information Bulletins (PIB)	Peru	Automated system integrating PIB/MET/FPL products by users.		SAM Office records.	A	Action Plan (2006) 80% implemented.	Indicated State	DEC/ 2010	
AIS 128 SAM	Annex 15, Chap 8.3.1; Doc 8733 ANP, Parte VI, Para. 28 Post-flight Information Service	Peru	Need for effective coordination between the AIS, ATS and users for the effective level of compliance with this requirement.		Records SAM Office.	A	Action Plan (2006) 80% implemented.	Indicated State	DEC/ 2009	
AIS 172 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Peru	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rules are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	Action plan 2006 30% implemented	Indicated State	DEC/ 2012	

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 176 SAM	ICAO Annex 4, Chapter 2.8; Chapter 16, Appendix 5. World Aeronautical Chart	Peru	Lack of compliance with the requirement for production of the world aeronautical chart (WAC, Scale; 1:1,000,000) , according with the sheets distribution as it is established by ICAO to this serie of chart. Not production of this serie of chart with ICAO specification and under the WGS-84 system. Need for effective implementation of AIS aerodrome units (Pisco) as required by the FASID,Table AIS-1. An AIS unit has been implemented at Pisco aerodrome with personnel having AIS licensing.		SAM Office records.	A	Action plan (2006)	Indicated State	2012	
AIS 188 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Peru	Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action Plan (2006) Ongoing	Indicated States	DEC/ 2012	
PRY Paraguay										
AIS 11 SAM	ICAO Annex 15, Para. 3.4.4. 1 y 3.4.4. 2. WGS-84.Geodetic System	Paraguay			SAM RO Records..	A	Action plan 2006. 90% implemented	Indicated State		
AIS 22 SAM	ICAO Annex 4. WGS-84.Geodetic System	Paraguay	Need for production of all required aeronautical charts under the WGS-84 system mainly the aerodrome/heliport charts with the geoid undulation as it is required. 1) All aeronautical charts under the WGS84 system are produced. 2) The geoidal ondulation will be published on 2008.		SAM RO records.	A	Action Plan (2006) 90% implemented.	Indicated State		1) All aeronautical charts under the WGS84 system are produced. 2) The geoidal ondulation will be published on 2008.

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 38 SAM	Annex 15; 3.6.1 English language	Paraguay	Requirement to use English for plain language texts in AIS publications		SAM RO Records..	A	Action Plan (2006) 15% implemented.	Indicated State.		Will stay like a difference with respect to the SARPS of reference. The same one is published according to the established requirements.
AIS 51 SAM	ICAO Annex 4, Chapter 2.8; Chapter 16, Appendix 5. World Aeronautical Chart	Paraguay	Lack of compliance with the requirement for production of the world aeronautical chart (WAC, Scale; 1:1,000,000) , according with the sheets distribution as it is established by ICAO to this serie of chart. Not production of this serie of chart with ICAO specification and under the WGS-84 system.		SAM Office records.	B	Action plan 2006.	Indicated State.		February 2008: 1) To short or medium term, the Cartographic Institute does not have predicted the production of this type of letters. 2) one will stay like a difference with respect to the SARPs.
AIS 55 SAM	Annex 4, 17; Cap. 17.1. VFR aeronautical chart (Scale, 1:500,000)	Paraguay	Need for production of this serie of ICAO chart under the WGS-84 system to satisfy the lack of production of the WAC aeronautical chart.		SAM Office records.	B	Action plan 2006.	Indicated State.		February 2008: 1) To short or medium term, the Cartographic Institute does not have predicted the production of this type of letters. 2) one will stay like a difference with respect to the SARPs.
AIS 72 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrumens approach charts.	Paraguay	Need to complete the inclusion of the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of all instrument approach charts - OACI.		SAM Office records.	A	Action plan (2006) 60% implemented.	Indicated State		February 2008: All aerodromos that have instrument approach charts, CAP 11.7.2 of Annex 4 "is not applicable" because the topography of the land in no case exceeds the indicated specifications.
AIS 113 SAM	ICAO Annex 15, Chapter 8; Doc 8733 ANP, Part VI, Para. 26. Pre-flight Information Bulletins (PIB)	Paraguay	Need for effective implementation in the provision of pre-flight bulletins (PIB) in all the designated aerodromes as it is indicated in FASID Table AIS 1; and maily with respect to the provision of users with an automated system integrating PIB/MET/FPL products.		SAM Office records.	A	Action Plan (2006) 30% implementedr.	Indicated State		February 2008: The provision of users with an automated system integrating PIB/MET/FPL products will be implemented on june 2008 with AMHS.

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 150 SAM	Annex 15, Para. 5.2.2.1. Use of English languaje in NOTAM.	Paraguay	Need of use of English languaje for those parts of the NOTAM requiring text in plain languaje (Appendix 6, 8 Item E).		SAM Office records.	A	Action plan 2006. 40% implemented.	Indicated State		February 2008: This was implemented on 2007. With the implementation of the notam automated system , these procedures will be updated and applicable in June
AIS 171 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Paraguay	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rules are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	Action plan 2006 100% implemented	Indicated State		February 2008: The implementation of the quality system is in the previous phase to ISO 9001:2000 certification. Date of considered implementation: 2008 March 2008: Quality Management System has already implemented. The process of certification ISO 9001:2000 was initiated.
AIS 187 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Paraguay	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action Plan 2006 Ongoing	Indicated States		February 2008: This requirement will be accomplished with the ISO 90001-2000
AIS 200 SAM	Annex 15, Cap 8.3.1; Doc 8733 ANP, Parte VI, Para. 28 Post-flight Information Service	Paraguay	Need for effective coordination between the AIS, ATS and users for the effective level of compliance with this requirement.		Records SAM Office.	A	Action Plan (2006). Lack of required procedures	Indicated State		
AIS 201 SAM	Annex 4, Chap 13, Para 13.6.1 C). Aerodrome/Heliport Chart - ICAO.	Paraguay	Need for the inclusion of geoid undulation in the Aerodrome/Heliport Chart - ICAO.		Records SAM Office.	A	Action Plan (2006) 80% implemented.	Indicated State		February 2008: The inclusion of geoidal undulation in the Aerodrome/Heliport Chart - ICAO will be accomplished in june 2008

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 227 SAM	CAR-SAM ANP Part VIII (AIS); Para. 65, 66, 67, 68 AND 69. Regional AIS automated system	Paraguay	Requirement for implementation of automated system at the AIS services, in agreement with the indicated in the CAR/SAM Air Navigation Plan..		Records SAM Office.	A	Action Plan (2006) 25% implemented.	Indicated State		February 2008: With the implementation of AMHS, this process will be accomplished in 2009.
SUR Suriname										
AIS 24 SAM	ICAO Annex 4. WGS-84.Geodetic System	Suriname	Need for production of all required aeronautical charts under the WGS-84 system.		SAM RO records.	A	Action Plan (2005 Ongoing.	Indicated State		
AIS 43 SAM	ANNEX 15 , Chap. 8; Doc 8733 ANP, Par. 20; FASID,Table AIS-1 Implementation of required AIS aerodrome units.	Suriname	Need for effective implementation of AIS aerodrome units (New Nickerie, Zandery and Zorg en Hoop) as required by the FASID,Table AIS-1.		Records SAM Office.	A	Action plan (2005) 80% implemented.	Indicated State.		
AIS 57 SAM	Annex 4, 17; Cap. 17.1. VFR aeronautical chart (Scale, 1:500,000)	Suriname	Need for production of this serie of ICAO chart under the WGS-84 system to satisfy the lack of production of the WAC aeronautical chart.		SAM Office records.	B	Action plan 2005	Indicated State.		
AIS 115 SAM	ICAO Annex 15, Chapter 8; Doc 8733 ANP, Part VI, Para. 26. Pre-flight Information Bulletins (PIB)	Suriname	Need for effective implementation in the provision of pre-flight bulletins (PIB) in all the designated aerodromes as it is indicated in FASID Table AIS 1; and maily with respect to the provision of users with an automated system integrating PIB/MET/FPL products.		SAM Office records.	A	Action plan 2005. 80% implemented	Indicated State		
AIS 129 SAM	Annex 15, Chap 8.3.1; Doc 8733 ANP, Parte VI, Para. 28 Post-flight Information Service	Suriname	Need for effective coordination between the AIS, ATS and users for the effective level of compliance with this requirement.		Records SAM Office.	A	Action plan 2005 70% implemented	Indicated State		
AIS 136 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrument Approach Charts - OACI.	Suriname	Need to include the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of instrument approach charts - OACI.		Records SAM Office.	A	Action plan 2005 70% implemented	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 161 SAM	ICAO Annex 4, Chapter 7;Par. 7.6.2 Enroute Navigation Charts - ICAO.	Suriname	Need to produce the ICAO Enroute Charts to a scale of representation, according to the users operational requirements and include in the AIP this Charts, also including the required Area Minimun Altitude (AMA) in such serie of charts.		SAM RO records.	A	Action plan 2005 70% implemented	Indicate State		
AIS 173 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Suriname	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rules are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	Action plan 2005 Ongoing	Indicated State		
AIS 189 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Suriname	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action plan 2005 Ongoing	Indicated States		
AIS 203 SAM	Annex 4, Chap 13, Para 13.6.1 C). Aerodrome/Heliport Chart - ICAO.	Suriname	Need for the inclusion of geoid undulation in the Aerodrome/Heliport Chart - ICAO.		Records SAM Office.	A	Action plan 2006 70% implemented	Indicated State		
AIS 229 SAM	CAR-SAM ANP Part VIII (AIS); Para. 65, 66, 67, 68 AND 69. Regional AIS automated system	Suriname	Requirement for implementation of automated system at the AIS services, in agreement with the indicated in the CAR/SAM Air Navigation Plan..		Records SAM Office.	A	Action Plan (2005) Ongoing.	Indicated State		
URY Uruguay										

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 25 SAM	ICAO Annex 4; Annex 15, Para. 3.6.4.1 and 3.6.4.2. WGS-84.Geodetic System	Uruguay	Lack of total implementation of the WGS-84 system, mainly concerning requirements as the survey of all required obstacles data, the publication of the geoid undulation as it is required. Need to produce the aeronautical charts under the WGS-84 (VFR 1:500.000 and 1:1.000.00 charts); mainly such charts where figures of geoid undulation should be indicated.		SAM RO records.	A	Action Plan (2005) 80% implemented	Indicated State		
AIS 40 SAM	Annex 15; 3.6.1 English language	Uruguay	Requirement to use English for plain language texts in AIS publications		SAM RO Records..	A	Action Plan (2005) 30% implemented	Indicated State.		
AIS 44 SAM	ANNEX 15 , Chap. 8; Doc 8733 ANP, Par. 20; FASID,Table AIS-1 Implementation of required AIS aerodrome units.	Uruguay	Need for effective implementation of AIS aerodrome units (Colonia, Maldonado, Montevideo/Angel Adami, Rivera and salto) as required by the FASID,Table AIS-1.		Records SAM Office.	A	Action Plan (2005) 80% implemeted	Indicated State.		
AIS 58 SAM	Annex 4, 17; Cap. 17.1. VFR aeronautical chart (Scale, 1:500,000)	Uruguay	Need for production of this serie of ICAO chart under the WGS-84 system to satisfy the lack of production of the WAC aeronautical chart.		SAM Office records.	B	Action plan (2005). Ongoing	Indicated State.		
AIS 79 SAM	ICAO Annex 4, Chapter 3. Aerodrome Obstacle Chart - ICAO, Type A.	Uruguay	Need for effective production of Aerodrome Obstacle Chart - ICAO, Type A., concerning the following airport: Artigas, Carmelo, Colonia, Durazno, Maldonado, Melo, Montevideo/Angel Adamii y Montevideo Intl/Carrasco, Paysandu, Punta del Este, y Rivera.		SAM Office records.	A	# Implementation Plan (2004) indicated that relevant action is being taken on the matter.	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 116 SAM	ICAO Annex 15, Chapter 8; Doc 8733 ANP, Part VI, Para. 26. Pre-flight Information Bulletins (PIB)	Uruguay	Need for effective implementation in the provision of pre-flight bulletins (PIB) in all the designated aerodromes as it is indicated in FASID Table AIS 1; and maily with respect to the provision of users with an automated system integrating PIB/MET/FPL products.		SAM Office records.	A	Action Plan (2005) 80% implemented	Indicated State		
AIS 174 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Uruguay	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rules are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	Action plan 2005 Ongoing	Indicated State		
AIS 190 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Uruguay	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action plan 2005 Ongoing	Indicated States		
AIS 204 SAM	Annex 4, Chap 13, Para 13.6.1 C). Aerodrome/Heliport Chart - ICAO.	Uruguay	Need for the inclusion of geoid undulation in the Aerodrome/Heliport Chart - ICAO.		Records SAM Office.	A	Action plan 2005 80% implemented	Indicated State		
VEN Venezuela										
AIS 26 SAM	ICAO Annex 4. WGS-84.Geodetic System	Venezuela	Need for production of all required aeronautical charts under the WGS-84 system.		SAM RO records.	A	Action Plan (2006) 60% implemented	Indicated State		
AIS 45 SAM	ANNEX 15 , Chap. 8; Doc 8733 ANP, Par. 20; FASID,Table AIS-1 Implementation of required AIS aerodrome units.	Venezuela	Need for effective implementation of AIS aerodrome units (San Antonio del Tachira and Paraguayana) as required by the FASID,Table AIS-1.		Records SAM Office.	A	Action Plan (2006) Ongoing	Indicated State.		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 75 SAM	ICAO Annex 4, Chapter 11; 11.7.2 and 11.10.6.5. Instrumens approach charts.	Venezuela	Need to complete the inclusion of the topographic (11.7.2), and the ground profile informations (11.10.6.5) in the production of all instrument approach charts - OACI.		SAM Office records.	A	Action Plan (2006) Ongoing.	Indicated State		
AIS 80 SAM	ICAO Annex 4, Chapter 3. Aerodrome Obstacle Chart - ICAO, Type A.	Venezuela	Need for effective production of Aerodrome Obstacle Chart - ICAO, Type A., concerning the following airport: Barcelona, Barquisimeto, Caracas, Charallave, Guayana, Maiquetia, Maracaibo Margarita, Maturin, Puerto Cabello, San Antonio del Táchira y Valencia.		SAM Office records.	A	Action Plan (2006) 50% implemented	Indicated State		
AIS 106 SAM	ICAO Annex 4, Chapter 7;Par. 7.6.2 Enroute Navigation Charts - ICAO.	Venezuela	Need to produce and include in the AIP the Enroute Charts - ICAO, also including the required Area Minimun Altitude (AMA) in such serie of charts.		SAM Office records	A	Action plan (2006) 50% implemented	Indicated State		
AIS 117 SAM	ICAO Annex 15, Chapter 8; Doc 8733 ANP, Part VI, Para. 26. Pre-flight Information Bulletins (PIB)	Venezuela	Need for effective implementation in the provision of pre-flight bulletins (PIB) in all the designated aerodromes as it is indicated in FASID Table AIS 1; and maily with respect to the provision of users with an automated system integrating PIB/MET/FPL products.		SAM Office records.	A	Action Plan (2006) Ongoing.	Indicated State		
AIS 130 SAM	Annex 15, Chap 8.3.1; Doc 8733 ANP, Parte VI, Para. 28 Post-flight Information Service	Venezuela	Need for effective coordination between the AIS, ATS and users for the effective level of compliance with this requirement.		Records SAM Office.	A	Action Plan (2006) 40% implemented.	Indicated State		
AIS 153 SAM	Annex 15, Para. 5.2.2.1. Use of English languaje in NOTAM.	Venezuela	Need of use of English languaje for those parts of the NOTAM requiring text in plain languaje (Appendix 6, 8 Item E).		SAM Office records.	A	Action Plan (2006) Ongoing	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
AIS 175 SAM	Annex 15, Para. 3.2 Implementation of Quality system (QS) at the AIS	Venezuela	It is required the implementation of a quality system (QS); as well as, of the quality assurance and quality control procedures at the AIS/MAP services.		Relevant technical documentation and rules are being prapared by the GREPECAS AIS/MAP Subgroup, in order to assist the CAR/SAM States to achieve this objective	A	Action plan 2006 Ongoing	Indicated State		
AIS 177 SAM	ICAO Annex 4, Chapter 2.8; Chapter 16, Appendix 5. World Aeronautical Chart	Venezuela	Lack of compliance with the requirement for production of the world aeronautical chart (WAC, Scale; 1:1,000,000) , according with the sheets distribution as it is established by ICAO to this serie of chart. Not production of this serie of chart with ICAO specification and under the WGS-84 system.		SAM Office records.	B	Action plan 2006 Ongoing	Indicated State		
AIS 191 SAM	ANNEX 15; Chap 3, 3.2.8, and 3.2.10 Integrity of aeronautical information/data.	Venezuela	Need that quality control (QC) system be implemented by the States, to ensure the required level of integrity of the aeronautical information/data issued and/or available. Application of cyclic redundancy check (CRC).		Registro Oficina SAM	A	Action plan 2006 Ongoing	Indicated States		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
COL Colombia										
ATM 1 SAM	RWY surface conditions (Annex 14, Vol. I, Chap. 3)	Colombia, SAN ANDRES/Sesquicentenario Aerodrome	Rubber contamination on 1st 1000 m of RWY 06. Uneven RWY surface holds numerous large puddles after rain. Poor quality of pavement		IFALPA (EC 2/28 referes)	A	Adopt and implement an airport maintenance programme "PENDING ACTION PLAN"	Colombia		
ATM 286 SAM	Visual Aids (Annex 14, Vol. I, Ch. 5 & Doc 8733, FASID CAR/SAM - AOP)	COLOMBIA/BARRANQUILLA/Ernesto Cortissoz	There is no RWY stripe marking	MAY/ 2003	ICAO Regular Mission (15/16 MAY 2003, Recommended Action AGA/02 of its respective Report)	B	Paint RWY stripe "PENDING ACTION PLAN"	COLOMBIA/ AEROCIVIL		
VEN Venezuela										
ATM 205 SAM	Annex 4, Chap 13, Para 13.6.1 C). Aerodrome/Heliport Chart - ICAO.	Venezuela	Need for the inclusion of geoid undulation in the Aerodrome/Heliport Chart - ICAO.		Records SAM Office.	A	Action Plan (2006) 50% implemented.	Indicated State		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
BRA Brasil										
CNS 19 SAM	Radio Navigation Service Plan. Table CNS 3. VOR/DME	Brazil, Corumba	This VOR/DME is not implemented	MAY/ 1989	This VOR would support air navigation along the air routes UA300 and UA304. Currently, an NDB is operating at the significant point	A	VOR/DME will be not installed . They asked to remove it fromTable CNS 3 of FASID	Brazil		It will be not implemented
CNS 23 SAM	Radio Navigation Service Plan. Table CNS 3. VOR/DME	Brazil, Ilheus	This VOR/DME is not implemented	MAY/ 1989	This facility, recommended for en route navigation, would support the air route UA314. Currently, an NDB is operating at the significant point	B	VOR/DME will be not installed . Brazil asked to remove it fromTable CNS 3 of FASID	Brazil		It willbe not implemented
ECU Ecuador										
CNS 29 SAM	Aeronautical Mobile Service Plan. Table CNS 1A. Lack of HF AMS communications in the Guayaquil FIR	Ecuador	Guayaquil AMS HF system out of service	SEP/ 2004	Due to civil works in Guayaquil International Airport the HF station of the mobile aeronautical service is out of service .	A	No information was received on action plan to re install the HF equipments.	Estado		
GUY Guyana										
CNS 30 SAM	FASID Table CNS 3	Timehri /Cheddi Jagan Intl Airport	ILS system out of service . This system was installed in 1978. Difficults in its maintenance.	OCT/ 2004	Since the ends of 2003 the ILS system is completely out of service. Lack of spare parts to repair the equipments .This was verified during the CNS mission in Guyana on October 2004.	A	No plan to implemt in a short term.	State		Lack of resource
CNS 31 SAM	FASID Table CNS 3	Timehri /Cheddi Jagan Intl Airport	DME system out of service . This system was installed in 1978. Difficults in its maintenance. Both DME unities out of service in their RF final power.	OCT/ 2003	Since the ends of 2003 the DME system is completely out of service. Lack of spare parts to repair the equipments .This was verified during the CNS mission in Guyana on October 2004.	A	No plan to implemt in a short term.	State		Lack of resource
PER Peru										
CNS 25 SAM	Radio Navigation Service Plan. Table CNS 3. ILS CAT II	Peru LIMA-CALLAO/Jorge Chavez	The current ILS sytem meets CAT I performance	MAY/ 1989	According to the Plan, the ILS requires Category II signal quality	B	Peru has indicated that the airport meets operational conditions for the Category. Only pending is ILS flight inspection.	Peru		
PRY Paraguay										

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
CNS 15 SAM	Radio Navigation Service Plan. Table CNS 3. DME	Paraguay ASUNCION/S. Pettirossi	This DME is not implemented	MAY/ 1989	This DME is associated with the ILS for approach and landing operations. NDBs are used as markers	A	PARAGUAY informed that they are not going to install the DME associated to the ILS , because the ILS counts with a medium and external radio marker.	Paraguay		It will be not implemented
CNS 21 SAM	Radio Navigation Service Plan. Table CNS 3. VOR	Paraguay, Mariscal Estigarribia	This VOR is not implemented	MAY/ 1989	This facility, recommended for en-route navigation, would support air routes UA320 and UA321	A	The modernization project of the Paraguayan air navigation system considers the VOR/DME. Date of VOR/DME implementation was not supplied.	Paraguay		
SUR Suriname										
CNS 26 SAM	Radio Navigation Service Plan. Table CNS 3. NDB	Suriname PARAMARIBO/Zorg en Hoop	This NDB is not implemented	MAY/ 1989	This facility was recommended for terminal navigation	B	The NDB won´t be installed The Aeronautical Administration of Surinam asked to remove the NDB from Table 3 of FASID.	Suriname		It will be not implemented

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
ARG Argentina										
MET 53 SAM	Notify the RVR for CAT 1 operations (Annex 3, Part I, Chapter 4, Rec. 4.6.3.2)	Argentina / Aeronautical meteorological stations	The RVR of SAEZ, SACO, SAZM, SARE and SAME have not been implemented.	AUG/ 2006	Plan the acquisition or repairment of the RVR.	A	Installation of RVR Integrated Systems, Nefobasimeter and Automatic Meteorological Station with visual presentations in MET and TWR.	FAA - CRA in coordination with Natl. MET Service.	2007	
MET 76 SAM	Notify the RVR for CAT 1 operations [(Annex 3, Part I, Chapter 4, Rec. 4.6.3.2]	Argentina / Aeronautical meteorological stations	The RVR of SAZS, SARI y SAWH have not been implemented.	AUG/ 2006	Plan the acquisition or repairment of the RVR.	A	Acquisition and installation of RVR Integrated Systems, Nefobasimeter and Automatic Meteorological Station with visual presentations in MET and TWR.	FAA - CRA in coordination with Natl. MET Service.	2008	Waiting for the assignment of the corresponding financial resources.
MET 77 SAM	Notify the RVR for CAT 1 operations [(Annex 3, Part I, Chapter 4, Rec. 4.6.3.2]	Argentina / Aeronautical meteorological stations	The RVR of SASA, SAZN SARP have not been implemented.	AUG/ 2006	Plan the acquisition or repairment of the RVR.	A	Acquisition and installation of RVR Integrated Systems, Nefobasimeter and Automatic Meteorological Station with visual presentations in MET and TWR.	FAA - CRA in coordination with Natl. MET Service.	2009	Waiting for the assignment of the corresponding financial resources.
MET 78 SAM	Notify the RVR for CAT 1 operations [(Annex 3, Part I, Chapter 4, Rec. 4.6.3.2]	Argentina / Aeronautical meteorological stations	The RVR of SASJ, SAWG, SANT have not been implemented.	AUG/ 2006	Plan the acquisition or repairment of the RVR.	A	Acquisition and installation of RVR Integrated Systems, Nefobasimeter and Automatic Meteorological Station with visual presentations in MET and TWR.	FAA - CRA in coordination with Natl. MET Service.	2010	Waiting for the assignment of the corresponding financial resources.
MET 79 SAM	Notify the RVR for CAT 1 operations [(Annex 3, Part I, Chapter 4, Rec. 4.6.3.2]	Argentina / Aeronautical meteorological stations	The RVR of SAWE, SAVC, SARF have not been implemented.	AUG/ 2006	Plan the acquisition or repairment of the RVR.	A	Acquisition and installation of RVR Integrated Systems, Nefobasimeter and Automatic Meteorological Station with visual presentations in MET and TWR.	FAA - CRA in coordination with Natl. MET Service.	2011	Waiting for the assignment of the corresponding financial resources.
BOL Bolivia										
MET 11 SAM	Exchange of OPMET information (ANP Basic CAR/SAM, para. 35 to 39)	Bolivia / Aeronautical meteorological stations and meteorological watch office (MWO) of La Paz	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 2B.	OCT/ 2006	a) Implement the COM/MET SIP recommendations for the SAM Region; and b) make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A	Implementation of the SIP COM/MET recommendations for the Sam Region. GREPECAS Recommendation 6/33.	AASANA		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
MET 41 SAM	Notify the RVR for CAT 1 operations [(Annex 3, Chapter 4, para. 4.7.4 a)]	Bolivia / Aeronautical meteorological stations.	RVRs SLCB, SLVR and SLTR have not been implemented or are not operational.	OCT/ 2006	Plan the acquisition or repair of the RVRs.	A		AASANA		
BRA Brasil										
MET 74 SAM	Notify the RVR for CAR III operations [Annex 3, Chapter 4, Standards: 4.6.3.1 and 4.6.3.4 c)]	Runway visual range	The RVR of SBBR and SBCG have not been implemented	NOV/ 2005	Plan RVR acquisition	A	The RVR SBBR has already been implemented in 2005. The RVR SBCG was acquired and the process of installation is foreseen for 2007.	DECEA	2007	
CHL Chile										
MET 75 SAM	Notify the RVR for CAT I Operations (Annex 3, Chapter 4, Rec. 4.6.3.2)	Chile, transmisometer	The RVR of SCIE and SCCI have not been implemented.	DEC/ 2006		A	To plan the acquisition of the transmisometer or forward-scatter meter for SCCI aerodrome. CORRECTED	DGCA in coordination with the MET authority		
COL Colombia										
MET 42 SAM	Notify the RVR for CAT 1 operations [(Annex 3, Part I, Chapter 4, Recommendation 4.6.3.2]	Colombia / Aerodrome meteorological stations	RVRs SKBQ, SKCG and SKLT have not been implemented or are not operational.	JUN/ 1996	Plan the acquisition or repairment of the SKLT RVR.	A	SKBQ RVR in repairment process; SKCG RVR will be acquired; SKRG RVR in repairment process. CORRECTED	UAEAC	2007	
ECU Ecuador										
MET 84 SAM	Observations and routine reports (annex 3, Part I, Chap. 4, Standard 4.3.2 a)	Ecuador, aerodrome meteorological Offices.	The standard has not been implemented.	MAY/ 2007	Update personnel and implement the standard.	A		DGCA		
MET 85 SAM	Observations and routine reports (annex 3, Part I, Chap. 4, Standard 4.4.2 a)	Ecuador, aerodrome meteorological Offices.	The standard has not been implemented.	MAY/ 2007	Update personnel and implement the standard.	A		DGCA		
GUY Guyana										
MET 17 SAM	Exchange of OPMET information (FASID CAR/SAM para. 35 to 39)	Guyana / Aeronautical meteorological stations and meteorological watch offices (MWO) of Georgetown	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 2B.	NOV/ 2006	a) Implement the COM/MET SIP conclusions for the SAM Region; and b) make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A		NCAA in coordination with Hidromet Nat. Service		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
MET 44 SAM	Report the RVR for CAT 1 operations [(Annex 3, Part I, Chapter 4, Recommendation 4.7.4 a)]	Guyana / Georgetown aeronautical meteorological station	RVRs SYCJ is not operational.	NOV/ 2006	Plan the repairment of the RVR	A		GCAA in coordination with Natl. MET Service		
MET 61 SAM	Requirements for communications, Annex 3, Chap. 11, Standard 11.1.1	Guyana, COM uit		NOV/ 2006	Suitable communications facilities shall be made available to permit MET offices to supply the required MET information to ATS units.	A	Project proposal for new equipment includes Automated Weather System. This will fulfill this task when it becomes available. It is envisaged that once the project is approved, the deficiency will no longer exist.	NCAA in coordination with the Hydromet Service		
PER Peru										
MET 46 SAM	Notify the RVR for CAT 1 operations (Annex 3, Chap 4, Rec 4.6.3.2)	Peru / Aeronautical meteorological stations	RVRs SPIM MID, SPHI, SPSO and SPTN have not been implemented.	JUN/ 1996	Plan the acquisition or repairment of the RVRs.	A	Chiclayo 2009, Pisco 2010 and Tacna 2011. The RVR MID of Lima, 2009.	CORPAC	2011	
PRY Paraguay										
MET 45 SAM	Notify the RVR for CAT 1 operations (Annex 3, Part I, Chapter 4, Recommendation 4.6.3.2)	Paraguay / aeronautical meteorological stations	RVRs SGAS is functioning but not in operation. The RVR SGES is not in operation.	OCT/ 2006	In SGAS, the equipment is installed but with communication problem. In SGES, the equipment is out of service and the purchase of a semi-automatic meteorological station is planned, including an RVR equipment.	A	In SGAS. Contract with ICAO is being reviewed for the acquisition of the RADIO-MODEM, to carry out the RVR connection and the ATS/MET units ATS/MET (CAP). A project is being developed, which is in the bidding process, for the acquisition of a semi-automatic meteorological station, including RVR for SGES, is foreseen.	DINAC	2007	
SUR Suriname										
MET 21 SAM	Exchange of OPMET information (CAR/SAM FASID para. 35 to 39)	Suriname / Aeronautical meteorological stations and meteorological watch office (MWO) of Paramaribo	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 2B.	JUN/ 1996	a) Implement the COM/MET SIP recommendations for the SAM Region; and b) make use of the Guide for the preparation, dissemination and use of SIGMET messages in the CAR/SAM Regions.	A		NCAA in coordination with the MET Centre		

OUTSTANDING DEFICIENCIES

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

IDENTIFICATION			DEFICIENCY				ACTION PLAN			
ID	Requirements	States/facilities	Description	Date first reported	Remarks	Priority	Description	Executing body	Date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11
MET 47 SAM	Report the RVR for CAT 1 operations (Annex 3, Part I, Chapter 4, Recommendation 6.3.2)	Suriname / Aeronautical meteorological stations	SMJP RVRs of Zandery - SMJP have not been implemented.	JUN/ 1996	Plan the acquisition or repairment of RVRs.	A		DCA		
MET 64 SAM	Requirements for communications (Annex 3, Standard 11.1.1)	Suriname COM unit		OCT/ 2004	Suitable telecommunications facilities shall be made available to permit MET offices to supply the required MET information to ATS units.	A		NCAA in coordination with the Guyana Hidromet Serv		
URY Uruguay										
MET 22 SAM	Exchange of OPMET information (FASID CAR/SAM para. 35 to 39)	Uruguay / Aeronautical meteorological stations and meteorological watch offices (MWO)	OPMET information is not being disseminated in accordance with the requirements of CAR/SAM FASID Tables MET 2A and MET 2B.	JUN/ 1996	Implement the COM/MET SIP Recommendations for the SAM Region.	A	Coordination between COM/MET.	COM/MET - WMO		
MET 80 SAM	Aerodrome meteorological stations and observations. (Annex 3, Chap 4, Standard 4.1)	Uruguay, SUCA and SURV.	There is not aerodrome meteorological station.	OCT/ 2006	Acquire and install the stations.	A		DINACIA/ DNM		
VEN Venezuela										
MET 67 SAM	FASID Table AOP 1 (CAR/SAM III-AOP 1-39)	Barcelona, Caracas, Maracaibo and Margarita	RVR assessments have not been implemented.	JUN/ 1996		A	Plan the acquisition of the required instruments.	INAC in coordination with the SMN		
MET 68 SAM	Exchange of OPMET information (CAR/SAM ANP Basic, paras. 35 to 39)	Caracs MWO and MET offices	MET offices do not have direct access to AFTN	DEC/ 2004	Implement COM Recommendations of SIP COM/MET for CAR/SAM Regions	A	Project for the modernization of the communications	INAC in coordination with the SMN	DEC/ 2008	
MET 86 SAM	Observations and routine reports (annex 3, Part I, Chap. 4, Standard 4.4.2 a)	Aerodrome Meteorological Offices.	The Standard has not been implemented.	MAY/ 2007	Update personnel and implement the Standard.	B		INAC	AUG/ 2007	

Agenda Item 5 Management of the GREPECAS Mechanism

5.1 Report of the ACG/7 Meeting

5.1.1 The Seventh Meeting of the Administration Coordination Group (ACG/7) held on 3 – 4 March 2008, at the ICAO Regional Office in Lima, Peru, reviewed the results of the work done by the GREPECAS contributory bodies, their respective terms of reference, the GREPECAS Terms of Reference, the *GREPECAS Procedural Handbook*, the schedule of meetings for 2008-2009 and respective State(s) contribution(s) for said meetings, and the provisional agenda of the GREPECAS/15 Meeting.

5.1.2 The Meeting recognized that GREPECAS should operate within the scope of the Business Plan and the Strategic Objectives approved by the ICAO Council and that the work programmes of GREPECAS contributory bodies should also be developed in terms of their deliverables in order to permit a better understanding of their goals and results.

5.1.3 The Meeting concurred that the permanent tasks contained in the various work programmes of the contributory bodies should be eliminated with very few exceptions; in general, tasks identified as permanent should be handled by the Regional Offices. Accordingly, the Meeting formulated the following decision:

DECISION 15/49 ASPECTS TO BE CONSIDERED IN DEVELOPING THE WORK PROGRAMMES OF GREPECAS CONTRIBUTORY BODIES

That, in developing the work programmes of the GREPECAS contributory bodies, the following aspects be considered:

a) the related strategic objective;

b) the contribution made to achieve that strategic objective;

c) other relevant tasks in the overall programme of GREPECAS contributory bodies;

d) the relationship to the Regional Air Navigation Plan and/or SARPs implementation;

Note: Until the new Regional Air Navigation Plan is developed, GREPECAS Contributory Bodies should refer tasks to Global Plan Initiatives (GPIs).

e) detail specific deliverables into the work programme in order to clarify understanding of the expected results; and

f) identify the completion date of the task.

5.1.4 The Meeting noted that the draft decision on restructuring the ATM/CNS Subgroup into a separate CNS group and ATM group had not been approved by the

members of GREPECAS and, therefore, the ATM/CNS Subgroup itself had made a restructuring proposal, which was documented under agenda item 3.6 of this Meeting.

5.1.5 Likewise, in order to achieve closer coordination between the proposed new subgroup, the decision had been made to create a coordination mechanism, but since the proposal had not been approved, the Meeting considered that the aforementioned mechanism was no longer justified.

5.1.6 The Meeting took note of a summary of the tasks set forth by the Human Resources and Training Subgroup (HRT/SG) and the reasons why it had been impossible to conduct activities. In this sense, and in spite of recognizing the importance of this subgroup, the Meeting agreed that the situation remained unchanged, making it impossible to support the activities of the cited group. Consequently, it was agreed to disband the HRT/SG and the following decision was formulated:

DECISION 15/50 DISBANDING OF THE HUMAN RESOURCES AND TRAINING SUBGROUP (HRT/SG)

That the HRT/SG be disbanded due to lack of specialized HR personnel in the Lima and Mexico Offices to support the activities of the HRT/SG and that the tasks related to training issues are being addressed as appropriate through the different GREPECAS contributory bodies.

5.1.7 The Meeting reviewed the *GREPECAS Procedural Handbook* and decided to circulate and post it on the GREPECAS website. Accordingly, the Meeting adopted the following decision:

DECISION 15/51 REVISED GREPECAS PROCEDURAL HANDBOOK

That Amendment 3 to the *GREPECAS Procedural Handbook* (Fifth Edition), as amended by the ACG/7 Meeting, be circulated and uploaded on the GREPECAS website.

5.1.8 Regarding the GREPECAS work programme for 2009 and 2010, the Meeting decided to discuss this issue under agenda item 5.2.

5.2 Review of GREPECAS and its Contributory Bodies Terms of Reference and Work Programmes

Effectiveness of PIRGs

5.2.1 On the effectiveness of PIRGs, the Meeting noted that the Council, on 18 March 2008, considered a report submitted by the ANC on this subject and took the following actions: a) agreed that the ANC should present, on an annual basis, a consolidated report to the Council containing the ANC's analysis of regional air navigation developments and the status of the resolution of air navigation deficiencies, as well as an indication of the value added from PIRGs' activities; b) retain, for the time

being, the terms of reference of PIRGs, except those of the APIRG and GREPECAS, which should be amended to exclude security matters; c) agreed that all ICAO contracting States that are service providers in an air navigation region and part of that region's ANP, should be included in the membership of that region's PIRG, and that user States are entitled to participate in any other PIRG meetings as a non-member. International organizations recognized by the Council may be invited as necessary to attend as observers to the PIRG meetings; and d) requested that the ANC present, in due course, a report to the Council on the outcome of its study on merits of PIRGs and on the development of new structures to coordinate Business Plan implementation activities related to safety, security and environmental subjects.

5.2.2 Consequent to the Council decision above, the Meeting noted the revised terms of reference of GREPECAS as shown in **Appendix A** to this part of the Report and agreed to include it in the *GREPECAS Procedural Handbook* accordingly.

5.2.3 The Meeting noted that the Regional Aviation Safety Group – Pan America (RASG-PA) was created under Global Safety Initiative (GSI)/5 – *Consistent Coordination of Regional Programmes* to address all safety related issues that are covered by the Global Aviation Safety Plan (GASP) and endorsed this approach.

5.2.4 After discussing the work done by GREPECAS and its contributory bodies under agenda items 3, 4, and 5, the Meeting proceeded to review its respective Terms of Reference and Work Programmes. In view of the above, the following decision was formulated:

DECISION 15/52 TERMS OF REFERENCE, WORK PROGRAMME, AND COMPOSITION OF GREPECAS CONTRIBUTORY BODIES

GREPECAS approves the Terms of Reference, Work Programmes, and composition of its contributory bodies as shown in **Appendices B to G** of this part of the Report.

5.2.5 The Meeting recognized that GREPECAS should operate within the scope of the Business Plan and Strategic Objectives and that the work programmes of GREPECAS contributory bodies should be detailed in terms of deliverables.

5.2.6 In addition, the Meeting considered that the use of MS project was not facilitating the work of the ACG to review the work programmes of GREPECAS contributory bodies and that better results could be obtained using Microsoft Excel to present the work programmes.

5.2.7 Based on the above, the Meeting formulated the following decision:

DECISION 15/53 NEW FORMAT FOR GREPECAS CONRIBUTORY BODIES WORK PROGRAMME

That GREPECAS contributory bodies:

a) use the format included as **Appendix H** to this part of the Report to present their work programmes to GREPECAS; and

b) use the format included as **Appendix I** to this part of the Report to be reviewed by the ACG.

5.2.8 With regard to the Meeting Programme for 2009, the Meeting took note that the next meeting of the ASB will be held in April at the ICAO NACC Regional Office. In this respect, a proposal of the Secretariat was analyzed and the following decision was formulated:

DECISION 15/54 TENTATIVE PROGRAMME OF MEETINGS FOR 2009

The tentative meeting programme for 2009 is approved, as shown in **Appendix J** to this part of the Report.

5.2.9 The Meeting went on to discuss the conditions and venues for the meetings contained in the aforementioned Appendix. In this respect, the Meeting thanked the offer made by the States, as summarized below:

ASB/10 Meeting (April 2009)	Mexico
AGA/AOP/SG/7 Meeting (August 2009)	Argentina/Mexico
AERMET/SG/10 Meeting (September 2009)	Argentina
CNS/ATM/SG/1 Meeting (October 2009)	Chile
AIM/SG/12 Meeting (October 2009)	
Next ATFM/TF Meeting	Colombia
ACG/8 Meeting (February 2010)	Mexico
GREPECAS/16 Meeting (April 2010)	Dominican Republic/ Jamaica

APPENDIX A

REVISED TERMS OF REFERENCE OF THE CARIBBEAN/SOUTH AMERICAN REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS)

(C-WP/13135, C183/9 on 18 March 2008 and PRES RK/1560 dated 20 June 2008)

1. **Membership**

All ICAO contracting States, who are service providers in an air navigation region and part of that region's ANP, should be included in the membership of that region's PIRG. Furthermore, user States are entitled to participate in any other PIRG meetings as a non-member. International organizations recognized by the Council may be invited as necessary to attend PIRG meetings as observers.

2. **The Terms of Reference of the Group are:**

a) continuous and coherent development of the CAR/SAM Air Navigation Plan and other relevant regional documentation in a manner that is harmonized with adjacent regions, consistent with ICAO SARPs and reflecting global requirements;

b) facilitate the implementation of air navigation systems and services as identified in the CAR/SAM air navigation plan with due observance to the primacy of air safety; and

c) identification and addressing of specific deficiencies in the air navigation field.

3. **In order to meet the Terms of Reference the Group shall:**

a) review and propose when necessary, the target dates for implementation of facilities, services and procedures to ensure the coordinated development of the Air Navigation System in the CAR and SAM Regions;

b) assist the ICAO Regional Offices providing services in the CAR and SAM Regions in their assigned task of fostering implementation of the CAR/SAM Regional Air Navigation Plan;

c) in line with the Global Aviation Safety Plan (GASP), ensure the conduct of any necessary systems performance monitoring, identify specific deficiencies in the Air Navigation field, especially in the context of safety and propose corrective action;

d) ensure the development and implementation of an action plan by States to resolve identified deficiencies, where necessary;

e) develop amendment proposals for the update of the CAR/SAM Air Navigation Plan necessary to satisfy any changes in the requirements, thus removing the need for regular regional air navigation meetings;

f) monitor implementation of air navigation facilities and services and where necessary, ensure interregional harmonization, taking due account of cost/benefit analysis, business case development, environmental benefits and financing issues;

g) examine human resource planning and training issues and ensure that the human resource development capabilities in the region are compatible with the CAR/SAM Regional Air Navigation Plan;

h) review the Statement of Basic Operational Requirements and Planning Criteria and recommend to the Air Navigation Commission such changes to them as may be required in the light of developments;

i) invite financial institutions, as required, on a consultative basis and at a time it considers appropriate in the planning process to participate in this work;

j) ensure close cooperation with relevant organizations and State grouping to optimize the use of available expertise and resources; and

k) conduct the above activities in the most efficient manner possible with a minimum of formality and documentation and call meetings of the GREPECAS only when the Secretary and the Chairperson, through the Administration Coordination Group (ACG), are convinced that it is necessary to do so.

APPENDIX B

ADMINISTRATION COORDINATION GROUP (ACG)

1. **Terms of reference**

a) To coordinate and harmonize administrative matters of GREPECAS and its contributory bodies, and to take part in the tasks relating to its internal organization, the holding of events, and the administrative supervision of the subgroups and task forces.

b) To expedite follow-up work of the GREPECAS and its contributory bodies between plenary meetings, taking into account the work undertaken by other contributory bodies active in the air navigation field in the CAR/SAM Regions.

c) To take follow-up action and monitoring of target dates assigned to tasks under a project management process.

2. **Work Programme**

TASK NUMBER	TASK DESCRIPTION	Priority	Date	
			Start	End
ACG/1	Review and propose amendments to the GREPECAS Procedural Handbook as required.	A		Continuous
ACG/2	Monitor the planning and progress of GREPECAS contributory body work programmes and meeting schedules and offer any advice thereon, as appropriate.	A		Continuous
ACG/3	Seek the prompt approval preferably by electronic means of draft GREPECAS Conclusions developed by GREPECAS Contributory Bodies on the basis of specific requests from such bodies or when the ACG deems that efficiencies could be derived.	A		Continuous
ACG/4	Prepare reports of ACG activities to each GREPECAS meeting, as appropriate.	A		Continuous
ACG/5	Review the GREPECAS working methods and propose specific actions to improve its performance.	A		Continuous
ACG/6	Prepare the draft Agenda for GREPECAS meetings and plan and coordinate Secretariat support work and documentation for such meetings.	A		Continuous

3. **Composition**

The Administration Coordination Group is composed by the Chairperson and Vice-Chairperson and Secretary of GREPECAS the Regional Directors, a ICAO HQ representative and the Secretaries of the contributory bodies. In the event of considering it necessary, the Chairpersons and Vice-Chairpersons of the contributory bodies will be invited to participate.

AVIATION SAFETY BOARD

1. **Terms of reference**

a) The Board will evaluate, validate, monitor and follow-up urgent air navigation deficiencies in the CAR/SAM regions and develop appropriate action to be taken.

b) The Board will act as an advocate and instrument in resolving urgent (U) deficiencies.

2. **Work Programme**

TASKS		**Priority**	**Completion**
1)	The Board will consider urgent deficiencies and develop solutions it would propose through the appropriate ICAO regional office. To achieve resolution, either an individual state/states/executing body, the Air Navigation Commission, or referral to the appropriate subgroup for further evaluation may need to be involved.	A	
2)	The Board will offer, through the ICAO Regional Offices, to assist an individual state/states/executing body in identifying resources and acting as a resource in order to resolve the shortcoming/deficiency through the advocacy with relevant high-level officials and/or donor organizations.	A	
3)	The Board when efforts to eliminate deficiencies prove unsuccessful after exhausting all alternatives, propose the inclusion of an alternate facility/procedure in the ANP; or when the inclusion would not be possible, provide the State(s)/Territory(ies)/users with an analysis concerning risk associated with such deficiency		

3. **Priority**

A High priority tasks, on which work should be speeded up.
B Medium priority tasks, on which work should be begun as soon as possible, but without detriment to priority **A** tasks.
C Tasks of lesser priority, on which work should be begun as time and resources allow, but without detriment to Priority **A** and **B** tasks.

4. **Composition**

The Aviation Safety Board is composed by the Chairperson and Secretary of GREPECAS, the Directors of the ICAO Regional Offices, a representative from the Regional Affairs Office at ICAO Headquarters, the Chairpersons and/or Vice-Chairpersons of the Subgroups and a representative from the following observer organizations: ACI, IATA, IBAC, IFALPA and IFATCA. The secretaries of the contributory bodies may participate in an advisory capacity as required.

APPENDIX D

AERONAUTICAL METEOROLOGY SUBGROUP (AERMETSG)

1. **Terms of reference**

a) Ensure seamless and consistent development of the CAR/SAM Regional Air Navigation Plan and the CAR/SAM Regional Plan for ATM System in the MET area;

b) Review in a continuous basis the list of MET deficiencies, identify new deficiencies that prevent the implementation or provision of MET service in the CAR/SAM Regions and propose actions for their correction;

c) Monitor the research and development of the ATM system, the tests and demonstrations in the ATM/MET field and facilitate the transference of these information and experience among the CAR/SAM States and recommend specific actions aimed at the implementation of MET services to satisfy ATM requirements.

d) Monitor the implementation of WAFS, IAVW and tropical cyclones warning system.

e) Monitor the implementation of a Quality Management System.

2. **Work Programme**

NUMBER OF TASK	TASK DESCRIPTION	Priority	Date	
			Start	End
MET/9-1	Monitor WAFS implementation, particularly in respect to the new WAFS Forecasts in the introduction of SIGWX Forecasts and ICE/TURB/CB	A	JUL2008	SEP 2010
MET/9-2	Monitor and plan the support for the training of the new WAFS SIGWX and ICE/TURB/CB forecasts	A	JUL 2008	SEP 2010
MET/9-3	Monitor and plan the support and capability of the States to implement ISCS G2 to G3 transition foreseen for December 2009.	A	JUL 2008	SEP 2010
MET/9-4	Carry out annual surveys on ISCS efficacy in order to send them to the focal points and analyze the results to be presented at the next AERMETSG meeting.	A	ABR 2008	ABR 2010
MET/9-5	Monitor IAVW implementation.	A	JUL 2008	SEP 2010
MET/9-6	Carry out biannual (May and November) SIGMET WV tests, analyze their results and present them at the next AERMETSG Meeting.	A	JUL 2008	SEP 2010
MET/9-7	Monitor the implementation of the tropical cyclones warning system.	A	JUL 2008	SEP 2010
MET/9-8	Review, in coordination with the Secretariat, the draft Guidance Material for the development of airport emergency plans in case of volcanic eruptions in the CAR/SAM Regions.	B	JUL 2008	SEP 2008
MET/9-9	Translate the draft Guidance Material for the development of airport emergency plans in case of volcanic eruptions in the CAR/SAM Regions.	B	TBD	TBD
MET/9-10	Coordinate the OPMET exchange control annually (10-16 JUN), analyze the results and present them in the next AERMETSG Meeting.	b	JUL 2006	SEP 2010
MET/9-11	Based on the last edition of Doc 9750 - *Global Air Navigation Plan for CNS/ATM*, develop the MET chapter of the *CAR/SAM Regional Plan for the implementation of CNS/ATM systems*, Document I.	B	JUN 2009	SEP 2010
MET/9-12	Develop, in coordination with the Secretariat, a draft Guide of MET documented procedures required by Standard ISO 9001:2000, and present it at the AERMETSG/10.	A	NOV 2009	SEP 2009
MET/9-13	Monitor the research and development of MET concept in ATM field and facilitate the transference of this information and experience among CAR/SAM States.	B	ENE 2009	SEP 2010
MET/9-14	Identify activities for the implementation of new meteorological services related both to training and application of the new ATM systems. Provide guidelines.	B	ENE 2009	SEP 2010
MET/9-15	Update the list of MET deficiencies.	A	JUL 2005	Continuous

2. **Priority**

A Tasks of high priority on which work should be expedited.

B Tasks of medium priority on which work should be undertaken as soon as possible but not to the detriment of Priority **A** tasks.

C Tasks of medium priority on which work should be undertaken as time and resources permit but not to the detriment of Priority **A** and **B** tasks.

3. **Composition**

Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, France, Panama, Paraguay, Peru, Spain, United States, Uruguay, Venezuela, COCESNA, IATA, IFALPA and WMO.

4. **Chairmanship**

Chairman: Carlos Roberto Salinas Rojas (Paraguay)
Vice-Chairman: Steven R. Albersheim (United States)

APPENDIX E

AERODROMES AND GROUND AIDS/AERODROME OPERATIONAL PLANNING SUBGROUP (AGA/AOP/SG)

1. **Terms of Reference**

a) To promote and follow-up the implementation of the AOP requirements of the CAR/SAM ANP and to place special emphasis on identifying, evaluating and proposing, according to established procedures, the corresponding timely corrective actions to the deficiencies affecting aircraft and airport operations.

b) Develop the planning for the AOP Part of the CAR/SAM ANP.

c) To carry out permanent co-ordination with GREPECAS contributory bodies in order to ensure appropriate integration of all tasks contributing to the implementation of the CAR/SAM ANP.

d) To review the requirements of the AOP Part of the CAR/SAM Regional Air Navigation Plan with a view to developing any changes required to comply with new technological developments including environmental impact aspects.

2. **Work Programme**

TASK NUMBER	TASK DESCRIPTION	PRIORITY	DATE	
			START	END
AGA/AOP/2	Planning and update the Table AOP 1 of the AOP Part of the ANP/FASID CAR/SAM at regular intervals based on the greater demands on airports in relation to air traffic growth and the accommodation of aircraft with more onerous physical requirements	B	1st Meeting	8th Meeting
AGA/AOP/3	Review and follow-up the implementation of corrective actions for AGA deficiencies that have direct impact on the ANP including: · ▪ Objects and depressions in runway strips, principally in the graded areas ▪ Runway and taxiway separations ▪ Runway and taxiway slopes ▪ Obstacles ▪ Secondary power supply and switching time ▪ Visual aids ▪ Fencing and perimeter roads ▪ Rescue and fire-fighting services ▪ Aerodrome emergency plans ▪ Runway surface conditions, rubber contamination and accumulation ▪ Runway strips and runway end safety areas Refer urgent (U) priority deficiencies, with proposed corrective actions, to the Aviation Safety Board.	A	1st Meeting	8th Meeting

TASK NUMBER	TASK DESCRIPTION	PRIORITY	DATE	
			START	END
AGA/AOP/6	Review demand/capacity problems at airports and develop options for alleviating airport congestion.	B	1st Meeting	8th Meeting
AGA/AOP/8	Development of samples that include the necessary minimum requirements for Emergency Plans and Emergency Operation Centres (EOC) of the aerodromes included in the ANP and online follow-up of their implementations, updating of complete and partial exercises in order to increase the safety of airports/aircraft	A	4th Meeting	7th Meeting
AGA/AOP/9	Follow-up of the implementation of the aerodrome certification process (basic documentation and certification of every aerodrome included in the ANP) with the corresponding implementation of Safety Management Systems, as a method to better identify and resolve the deficiencies that compromise the implementation of these processes	A	4th Meeting	8th Meeting
AGA/AOP/10	Follow-up of the maintenance at ANP aerodromes (runways), of the action plans and of the resolution of these deficiencies	A	4th Meeting	8th Meeting

3. **Priority**

A High priority tasks, on which work should be speeded up.

B Medium priority tasks, on which work should commence as soon as possible, but without detriment to priority **A** tasks.

C Tasks of lesser priority, on which work should commence as time and resources allow, but without detriment to Priority **A** and **B** tasks.

4. **Composition**

Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Haiti, Honduras, Mexico, Paraguay, Trinidad and Tobago, United States, Uruguay, Venezuela, ACI, ALACPA, CARSAMPAF, IATA, IFALPA and IFATCA.

5. **Chairpersons**

Chairman	Norberto Cabrera (Cuba)
Vice-Chairman	Alberto Palermo (Argentina)

APPENDIX F

TERMS OF REFERENCE AND WORK PROGRAMME OF THE AERONAUTICAL INFORMATION MANAGEMENT SUBGROUP (AIM/SG)

1. Terms of Reference

1.1 Foster and ensure the evolution of CAR/SAM Aeronautical Information Services from a manual operational environment to an environment where digital aeronautical information of high quality and integrity is processed and exchanged electronically to support the implementation of CNS/ATM systems, GNSS, operational ATM and a state-of the-art FMS

1.2 Aeronautical Information Management (AIM) apply in a global and in a interoperable basis the provision of aeronautical information and data covering the needs of the present and future ATM system needs and all the phases of flight for use by pilots, air traffic controllers, and other data users.

2. Work Programme

TASK NUMBER	TASK DESCRIPTION	PRIORITY	DATE	
			START	END
AIM /1	Develop strategies and policies to establish the basic requirements and planning criteria for the evolution of AIS services within an effective Aeronautical Information Management (AIM) environment, in keeping with the components of the Global Interoperational Concept.	A	2007	2010
AIM /2	Coordinate the application of quality systems in AIM services, according to the relevant ISO standards. Propose action plans for the implementation by CAR/SAM States of these systems; and assess the problems facing AIM services for the implementation of the cited systems.	A	2007	2008
AIM /3	Define the requirements to ensure due process when evaluating personnel of human factor within the framework of effective aeronautical information management, together with the consistent application of CAR/SAM AIM training programmes, taking also into account the need for basic criteria to ensure to development of an English language training programme related to effective aeronautical information management.	B	2007	2010

TASK NUMBER	TASK DESCRIPTION	PRIORITY	DATE	
			START	END
AIM/4	Coordinate the development of basic operational requirements and the required strategies for adoption of aeronautical information conceptual and exchange models (AICM/AIXM) in the CAR/SAM Regions, in order to facilitate the electronic exchange of digital aeronautical information/data between operational systems and their manual inter-functionalities, both within the CAR/SAM Regions, as well as between these and other ICAO Regions.	B	2008	2010
AIM/5	Implement practical guides to assist the States in the provision of electronic terrain and obstacle data, Doc 9881, for the electronic representation of aeronautical charts, as well as in the drafting of electronic aerodrome obstacle charts, as required.	A	2007	2010
AIM/6	Conduct the required relevant studies for the use of Geographical Information Systems (GIS) in AIM, as well as to prepare technical guides for the production by CAR/SAM States of VFR Aeronautical Charts (Scales between 1:500,000 and 1:1,000,000) in digital format.	A	2007	2010
AIM/7	Periodically update the CAR/SAM Regional Navigation Plan (Part VIII, AIS) in order to ensure its effective evolution with respect to the Global CNS/ATM Plan and in keeping with the SARPS contained in ICAO Annexes 4 and 15.	A	2008	2010
AIM/8	Promote and follow-up the effective implementation of AIM requirements according to the established procedures in order to take the corresponding corrective actions to resolve deficiencies affecting air operations.	A	2007	2008
AIM/9	Coordinate, on an ongoing basis, with all GREPECAS contributory bodies, in order to ensure proper integration of all areas contributing to CNS/ATM implementation.	A	2007	2010

3. **Priority**

A High priority tasks, on which work should be speeded up.

B Medium priority tasks, on which work should commence as soon as possible, but without detriment to priority **A** tasks.

C Tasks of lesser priority, on which work should commence as time and resources allow, but without detriment to Priority **A** and **B** tasks.

4. **Composition**

Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, France, Paraguay, Peru, Spain, Trinidad and Tobago, United States, Venezuela, COCESNA, IATA, and PAIGH.

5. **Chairperson**

Chairman: Mrs. Noemí Carta (Cuba)
Vice-Chairman: Mr. Rafael Torres (Venezuela).

APPENDIX G

TERMS OF REFERENCE OF THE CNS/ATM SUBGROUP

1. **Terms of Reference (TORs)**

1. To plan a performance based transition to the ATM system envisaged in the Global ATM Operational Concept, considering the regional performance objectives, supported by the Global Air Navigation Plan Initiatives (GPIs);

2. Carry out CNS/ATM CAR/SAM planning activities to facilitate and harmonize the inter-regional implementation process to obtain in the near and medium-terms, clear benefits for the ATM community; and

3. In meeting these TORs, the Subgroup should perform the following tasks:

a) monitor the CNS/ATM aspects of the CAR/SAM Air Navigation Plan and propose corresponding amendments to keep it up-to-date;

b) identify and report CNS/ATM air navigation deficiencies based on the Council approved methodology and GREPECAS complemented procedures; and

c) considering the existing performance objectives (new objectives to be developed as necessary), develop detailed tasks, identify deliverables with deadlines and monitor implementation of the following:

- Performance Based Navigation
- Air Traffic Flow Management
- Civil/Military coordination
- Automation
- Situational awareness (surveillance)
- RVSM
- Infrastructure for ground-to-ground and ground to air Communication
- Transition to the new ICAO Flight Plan Model
- Identify the environmental benefits derived from short and medium-term ATM improvements

Note: Identified performance objectives are attached. A new document will be developed containing all performance objectives to be reviewed at each meeting.

Composition: Argentina, Antigua, Barbados, Bolivia, Brazil, Chile, Colombia, Cuba, Dominican Republic Ecuador, France, Guatemala, Haiti, Jamaica, Mexico, Panama, Paraguay, Peru, Spain, Trinidad & Tobago, United States, Uruguay, Venezuela, ARINC, COCESNA, IATA, IFALPA, IFATCA and SITA

APPENDIX H

MODEL TABLE PROPOSED FOR GREPECAS CONTRIBUTORY BODIES WORK PROGRAMME

Valid GREPECAS Conclusions/ Decisions/ Strategic Objective	Task Number	Task	Follow-up Action	To be initiated by	Status	Deliverable	Deadline
1	2	3	4	5	6	7	8

EXPLANATION OF THE MODEL TABLE PROPOSED FOR GREPECAS CONTRIBUTORY BODIES WORK PROGRAMME

Number / Column Title	Contents Description
1 / No.	Indicates the relation of the task with ICAO strategic objective/objectives and/or GREPECAS valid conclusions or decisions
2/ Task number	Indicates the number of the task assigned by the Subgroup or Committee of GREPECAS.
3/ Task	Description of the Task to be carried out
4/ Follow-up Action	Indicates the mechanism for follow up of the tasks execution (ICAO Regional Offices Activities, Coordination Meeting, Meetings of the Subgroup Task Forces or informal meetings, etc.)
5/ To be initiated by	Indicates Responsible person or group for the execution of the task
6/ Status	Indicates the advance status of task implementation
7/ Deliverable	Indicates the expected product
8/ Deadline	Indicates the deadline for the delivery of the product describes in column 5

WORK PROGRAMME OF GREPECAS CONTRIBUTORUY BODIES

FOR REVISION BY THE ACG

Task No.	Strategic Objective	Task	Activities	Responsible	Execution (%)	Deliverable (%)	Period	
							Start	End
1	2	3	4	5	6	7	8	9

GREPECAS ACTIVITIES DURING 2009

DAY		W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T
JANUARY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
FEBRUARY							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28					
MARCH							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	25	26	27	28	29	30		
APRIL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30								
MAY			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	31				
JUNE							1	2	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
JULY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31								
AUGUST				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	26	28	29	30	31					
													AGA/AOP/SG/7																										
SEPTEMBER							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
																				AERMETSG/10																			
OCTOBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31								
						AIM/SG/12																				ATM/CNS/7													
NOVEMBER					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
DECEMBER							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
DAY								T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	

Agenda Item 6 Other business

6.1 Aviation environmental impact

6.1.1 The Meeting noted that the ICAO Committee on Aviation Environmental Protection (CAEP) has initiated, through an Independent Expert (IE) Panel process, a study to examine and make recommendations for noise, nitrogen oxides (NOx) and fuel burn goals with respect to air traffic operational improvements in the mid-term (10 years) and the long-term (20 years). The IE Panel will work in close collaboration with the ICAO Panels, such as the Air Traffic Management Requirements and Performance Panel (ATMRPP) and other groups and organizations involved in the definition and implementation of CNS/ATM systems based on the Global Air Navigation Plan and the Global Operational Concept to support this effort and plans to have a final report available for the CAEP Steering Group by April 2009.

6.1.2 The Meeting was informed that the 36th Session of the ICAO Assembly in 2007 established the Group on International Aviation and Climate Change (GIACC) consisting of 15 high-level government officials from States that are geographically representative of developed and developing countries alike. Their collective mandate is to develop and recommend to ICAO an aggressive programme of action for international aviation and climate change to be considered by the Organization under a timeline that takes into account the 15th Conference of the Parties to the UNFCCC in Copenhagen at the end of 2009.

6.1.3 The Meeting noted airline operators are facing a crisis in terms of operating costs due to rising fuel costs. To minimize the impact, the Meeting invited States to work with ICAO and industry stakeholders to deliver further operational efficiencies. Considering the critical nature of the fuel crisis, States were asked to urgently consider areas in their respective airspace and ATS operations where fuel efficiencies can be gained. No matter how small they are, if implemented quickly, these changes can have a significant effect on airline fuel consumption.

6.1.4 The Meeting noted the increased importance of CNS/ATM activities in the management of aviation's environmental impacts. Against the background of the ICAO goal of limiting or reducing the impact of aviation emissions on the global climate, the Meeting discussed responsibility in environmental matters. Air navigation service providers need to consider environmental benefits when defining systems for air traffic services, including the environmental savings of new routes, terminal procedures and ground movements. The Meeting called on all stakeholders to take a more proactive approach to environmental management and pursue the use of operational measures that can limit or reduce the environmental impact of aircraft engine emissions.

6.1.5 The Meeting noted that Chile fully supported these efforts and has put a number of initiatives related to mitigation of climate change due to aviation in place. Technological measures, operational and infrastructure improvements to address environmental issues and, in particular, those related to aviation emissions are the focus of attention for all stakeholders in the Western Hemisphere. The Meeting recognized that GREPECAS plays an important role in implementing these improvements

directly contributing to the environment. Taking into account the offer received from this State as well as from Cuba, the Meeting requested the Regional Offices to circulate the policies that these States have in this respect.

6.2 Human factors in the provision of air traffic services

6.2.1 The Meeting was informed about the results of a study on human factors in the provision of air traffic services in Chile, taking into account general aspects of air traffic controller performance regarding both the technical and non-technical profile. The complete report appears in **Appendix A** to this part of the Report.

6.2.2 The Meeting also took note of the project conducted between October 2006 and May 2007, to diagnose human factor conditions in the provision of air traffic services in Chile. The diagnostic study included recommendations on strategies and improvements in terms of equipment, work organization and training, which combined ergonomic and physiological requirements with safety objectives to ensure efficient and humanly sustainable performance of air traffic controllers.

6.2.3 The three outputs of the aforementioned study are: the non-technical profile of air traffic controllers, the ideal ergonomic conditions for ATS and a diagnostic on human factors in ATC.

6.2.4 The diagnostic study on human factors gave recommendations to resolve the identified deficiencies; created a training programme to address the more relevant issues; and delivered a digital interactive self-learning manual on the main aspects of human factor and error management in keeping with ICAO recommendations and the findings of the study.

APPENDIX A

"HUMAN FACTORS IN THE PROVISION OF AIR TRAFFIC SERVICES IN CHILE"

1. Introduction

1.1 A study project on the aforementioned topics was prepared given the need to conduct a study covering the non technical profile of ATCs, to state the ideal ergonomic conditions for ATC units, and to make a diagnosis of human factors in ATC, and that would deliver recommendations and a training programme and train facilitators for the implementation of said plan.

1.2 The diagnosis was made of human factors in the provision of air traffic services in Chile between October 2006 and May 2007, covering a total period of 34 weeks. It was carried out by an external firm that was awarded the study in a public tender.

1.3 The study was evaluated by stages, as provided for in the bidding conditions.

1.4 Three final products were delivered as a result of the study: Non Technical Profile of Air Traffic Controllers, Ideal Ergonomic Conditions for ATS and Diagnosis of Human Factors in ATC.

1.5 The diagnosis of human factors contained recommendations for overcoming the deficiencies that were found, created a training programme to deal with the most relevant issues, and produced an interactive digital manual for training through self-learning about the main aspects of human factor management and error, in keeping with ICAO recommendations and the findings of the study conducted.

2. Development of the Human Factors Programme

2.1 Non Technical Profile

- Determination of the technical profile of ATC through a bibliographic study, identifying aeronautical licensing requirements according to DAR 01 (ICAO Annex 1).
- Analysis of the curriculum taught at the Technical Aeronautical School for the ATC career.
- Interviews of supervisors and ATCs.
- Bibliographic review of quality and safety (state-of-the-art).
- Formulation of the non technical profile for ATC.
- Construction of assessment tools for assessing the non technical profile.
- Proposal of the non technical profile.

2.2 Ideal ergonomic conditions

- Familiarity with ATC units through on-site visits.
- Overall definition of the appropriate environmental factors for job performance in ATC.
- Study and definition of desirable factors, physical condition and state of health for ATC personnel.
- Proposal of ideal conditions.
- Validation of proposals
- Development of assessment tools for the evaluation of the non technical profile and its validation.

2.3 Diagnosis of human factors

- Diagnosis of ergonomics, physiology and quality of life.
- Diagnosis of the organisational climate, internal communications and culture.
- Diagnosis of error case history, analysis of job risks.
- Evaluation of non technical skills and detection of training needs.
- Recommendations on human factors, based on a review of the background.
- Implementation of a programme on human factors for ATC.
- Sensitisation workshop in ATC human factors for facilitators.
- Design, definition and distribution of the ATC human factors self-training manual.

3. Conclusion

3.1 The total ATC system performance was considered in the implementation of this project, from head offices to line controllers.

3.2 Progress has been noted among the ATCs in taking up the knowledge transferred during the implementation of the project on human factors, as a self-care tool, which reduces the negative effects of conditions that are not favourable to ATC performance in a safe environment.

3.3 While it is true that the facilitators in human factors were not chosen on the basis of a pre-established psychological profile, which caused demotivation among them and their students, in practice, self-motivation, which was part of those same workshops, was able to get them to show the necessary energy and motivation to ensure the success of the project in terms of its goals.

3.4 To some extent, greater integration of the heads of each of the ATC units, as the fundamental basis for project definition, was lacking. This integration has been considered for the continuation of the project.