FINAL VERSION



## INTERNATIONAL CIVIL AVIATION ORGANIZATION NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE

## FOURTH CENTRAL CARIBBEAN WORKING GROUP MEETING

## C/CAR WG/4

## **SUMMARY OF DISCUSSIONS**

SANTO DOMINGO, DOMINICAN REPUBLIC, 9 TO 13 FEBRUARY 2004

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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#### HISTORICAL

#### ii.1 Place and Date of the Meeting

The Fourth Meeting of the Central Caribbean Working Group (C/CAR WG/4) was held at the V Centenario Hotel in Santo Domingo, Dominican Republic, from 9 to 13 February 2004.

#### ii.2 **Opening Ceremony**

On behalf of the North American, Central American and Caribbean Office of ICAO, Mr. Michiel Vreedenburgh thanked the Government of Dominican Republic for hosting the Meeting, explained the scope of the Meeting's Agenda and pointed out the need of continuing the efforts towards the development of air navigation systems in the Central Caribbean.

Mr. Salvador Flores, Assistant to the Director of Civil Aviation of Dominican Republic, welcomed the participants to the Meeting on behalf of his Government and opened the Meeting.

#### ii.3 **Organization of the Meeting**

The Meeting was chaired by Mr. Jacques Boursiquot, Haiti, Chairman of the Central Caribbean Working Group and Mr. Francisco Artiles, Dominican Republic, was elected Vice-Chairman for the duration of this Meeting. Mr. Michiel Vreedenburgh, Regional Officer, Aviation Security acted as Secretary with the assistance of Mr. Samuel Véliz, Regional Officer Aerodromes and Ground Aids and Mr. Bernal Mesen, Regional Officer Aeronautical Information Services/MAP, all from the ICAO NACC Regional Office.

#### ii.4 Working Languages

The working languages of the Meeting were Spanish and English. The working papers and Summary of Discussions of the Meeting were available to participants in both languages.

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ii.5	Agend	Agenda	
	The M	eeting ac	dopted the following agenda:
Agenda Item 1	:	Appro	val of the Meeting Agenda and Schedule
Agenda Item 2	2:	Genera	l Air Navigation Matters
		2.1	Valid Conclusions/Decisions of previous C/CAR/WG and C/CAR/DCA Meetings
		2.2	Air Navigation Deficiencies
		2.3	CNS/ATM Systems
Agenda Item 3	3:	Specifi	c Air Navigation Activities and Developments
		3.1	Air Traffic Management (ATM) – C/CAR ATM TF
		3.2	Communications, Navigation and Surveillance (CNS) – Radar Data Sharing and VHF/AMS Coverage TFs
		3.3	Aeronautical Information Services (AIS)
		3.4	Aerodromes (AGA)
		3.5	Aeronautical Meteorology (MET) – C/CAR MET TF
		3.6	Search and Rescue (SAR)
Agenda Item 4	l:	Review	v of the Terms of Reference and Work Programme
Agenda Item 5: Next Meet		Next N	leeting Site
Agenda Item 6	ó:	Other	business

#### ii.6 Schedule and Work Mode

The Meeting agreed to hold its daily sessions from 8:30 to 14:00 hours, with adequate breaks. The Meeting also agreed to work as a whole, establishing Ad hoc Groups to deal with: Deficiencies, AIS and ATM agenda items.

#### ii.7 Attendance

The Meeting was attended by 7 CAR Region States, and 1 International Organization, making a total of 30 delegates as indicated in the list of participants on page iii-1 to iii-6. The Meeting regretted the absence of the following invited States/Territories/International Organizations: Aruba, Bahamas, Colombia, Mexico, Panama, Turks and Caicos Islands, Venezuela, ACI, COCESNA, IATA and IFALPA.

#### ii.8 **Conclusions and Decisions**

The Central Caribbean Working Group recorded its activities as Conclusions and Decisions as follows:

DRAFT

**CONCLUSIONS:** Activities requiring a communication to States/Territories/International Organizations and/or endorsement by Central Caribbean Directors of Civil Aviation (C/CAR DCAs)

**DECISIONS :** Internal activities of the Central Caribbean Working Group (C/CAR WG)

#### LIST OF DRAFT CONCLUSIONS AND DECISIONS ADOPTED BY THE C/CAR/WG/4 MEETING

No.	DRAFT CONCLUSIONS	PAGE NO.
4/1	C/CAR/WG CONCLUSIONS IMPLEMENTATION REPORTS	2-1
4/2	GUIDANCE FOR THE STUDY OF RVSM OPERATIONAL REQUIREMENTS IN ATM AUTOMATED SYSTEMS	3-1
4/3	DEVELOPMENT OF ATS QUALITY ASSURANCE PROGRAMMES AND ATS CONTINGENCY PLANS IN THE CENTRAL CARIBBEAN	3-2
4/4	ATS ROUTES IN THE C/CAR AIRSPACE	
4/6	PARTICIPATION IN THE CAR/SAM RVSM TASK FORCE	3-2
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4/12	FOLLOW-UP TO THE TOTAL IMPLEMENTATION OF WGS-84	3-5
4/13	MET SHORT COURSE FOR AIR NAVIGATION PERSONNEL	3-7
4/17	C/CAR/WG WORK PROGRAMME	4-1
418	C/CAR CNS/ATM IMPLEMENTATION PLAN	4-1

No.	DECISIONS	PAGE NO.
4/5	TERMS OF REFERENCE AND WORK PROGRAMME OF THE C/CAR ATM TASK FORCE	3-2
4/7	VHF/AMS COMMUNICATIONS COVERAGE	3-3
4/9	C/CAR/WG TASK FORCE MEETINGS	3-4
4/10	RADAR DATA SHARING	3-4

### FOURTH CENTRAL CARIBBEAN WORKING GROUP MEETING (C/CAR WG/4) SUMMARY OF DISCUSSIONS

HISTORICAL

No.	DECISIONS	PAGE NO.
4/11	ESTABLISHMENT OF THE C/CAR AIS/MAP TASK FORCE	3-5
4/14	C/CAR MET TASK FORCE	3-7
4/15	C/CAR SAR TASK FORCE	3-8
4/16	DEVELOPMENT AND INTEGRATION OF THE SEARCH AND RESCUE PLANS IN THE CENTRAL CARIBBEAN	3-8

#### List of Working, Information and Discussion Papers ii.9

# Working Pape rs

Number	Agenda Item	Title	Date	Presented by
WP/01	1	Agenda and Schedule	19/01/04	Secretariat
Rev.				
WP/02	2.1	Status of the Outstanding C/CAR WG Conclusions and Decisions	19/01/04	Secretariat
WP/03	2.2	Review of the ICAO Database of Air Navigation Deficiencies in the Central Caribbean	13/01/04	Secretariat
WP/04	2.3	Need for Improvement and Implementation of ATM Automated Systems further to ATM and CNS Developments in the Central Caribbean	26/01/04	Secretariat
WP/05	3.1	ATM Progress in the Central Caribbean	22/01/04	Secretariat
WP/06	3.2	Follow-Up and Coordination for the Implementation of the CNS Systems in the Central Caribbean	20/01/04	Secretariat
WP/07	3.3	WGS-84 Implementation	20/01/04	Secretariat
WP/08	3.4	Certification and Audits	20/01/04	Secretariat
WP/09	3.5	Current Status of the WAFS Operations and the Activation of the C/CAR MET Task Force	22/01/04	Secretariat
WP/10	3.6	SAR Plan for the Central Caribbean (C/CAR)	23/01/04	Secretariat
WP/11	4	Terms of Reference and Work Programme of the C/CAR WG	21/01/04	Secretariat
WP/12 Rev.	3.1	Cuban Considerations on the ATS Routes Study in the C/CAR	05/02/04	Cuba
WP/13	3.3	Reactivation of the AUTO AIS C/CAR Task Force	04/02/04	Rapporteur of the AUTO AIS C/CAR TF

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#### **Information Papers**

Number	Agenda Item	Title	Date	Presented by
IP/01		General Information	19/01/04	Secretariat
Rev.				
IP/02		List of Working and Information Papers	04/02/04	Secretariat
IP/03	2.1	Conclusions of the C/CAR DCA/6 Meeting relevant to the C/CAR WG	16/01/04	Secretariat
IP/04	3.1	ICAO language proficiency requirements	12/01/04	Secretariat
NI/05	2.1	Estado del Cumplimiento de las Conclusiones y Decisiones Válidas por parte de Cuba ( <b>in Spanish only</b> )	04/02/04	Cuba
IP/06	5	Meeting Host Rotation Programme for Future C/CAR Working Group Meetings	21/01/04	Secretariat
IP/07	6	Tentative Schedule – 2004 ICAO NACC Office Meetings, Seminars, Courses and Workshops	19/01/04	Secretariat
NI/08 Rev.	2.2	Plan de Acción de Cuba para la Solución de Deficiencias en el Ámbito de la Navegación Aérea ( <b>in Spanish only</b> )	05/02/04	Cuba
NI/09	2.3	Resultados de los Ensayos SBAS/EGNOS en Cuba (in Spanish only)	04/02/04	Cuba
NI/10	3.1	Avances en el Área ATM en Cuba (in Spanish only)	04/02/04	Cuba
NI/11	3.3	Logros Obtenidos por Cuba en AIS/MAP (in Spanish only)	04/02/04	Cuba
NI/12	3.5	Acciones para el Desarrollo y Perfeccionamiento del Servicio Meteorológico Aeronáutico en Cuba ( <b>in Spanish</b> <b>only</b> )	04/02/04	Cuba

#### Flimsies and Discussion Papers

Number	Agenda Item	Title	Date	Presented by
FLIMSY/1	3.5	Draft Terms of Reference and Work Programme of the Central Caribbean MET Task Force	10/02/04	Cuba and Dominican
				Republic
DP/01	3.3	Draft Terms of Reference and Work Programme of the C/CAR AIS/MAP TF	11/02/04	Rapporteur of the Ad hoc
				Group
DP/02	3.1	Results of the C/CAR ATM Task Force Ad hoc Meeting	11/02/04	Rapporteur of the C/CAR ATM TF

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#### Agenda Item 1:Approval of the Meeting Agenda and Schedule

1.1 The Secretariat presented WP/01 Rev. with the Draft Meeting Agenda and Schedule inviting the Meeting to propose any amendments. The Meeting Agenda and Schedule were approved as presented.

Agenda Item 2: General Air Navigation Matters

## 2.1 Valid Conclusions/Decisions of previous C/CAR/WG and C/CAR/DCA Meetings

2.1.1 The Secretariat presented WP/02 with the outstanding conclusions and decisions of previous C/CAR/WG meetings and invited the Meeting to report on the updated status of their implementation. The Meeting reviewed and commented on the status of the conclusions and decisions, the results of which are presented in **Appendix A** to this part of the report.

2.1.2 Cuba presented NI/05 on the status of implementation in that State of the outstanding conclusions of previous C/CAR/WG meetings. The Meeting noted that Cuba's initiative of preparing this Information Paper was excellent as the exercise facilitated that State to review its progress and status in implementing the conclusions and provided the Meeting and the Secretariat a formal report in a clear format. The Meeting decided that it would be very beneficial for all States/Territories to prepare a similar paper for each C/CAR/WG meeting, and therefore adopted the following Decision:

#### DRAFT CONCLUSION 4/1 C/CAR/WG CONCLUSIONS IMPLEMENTATION REPORTS

That, States/Territories, prepare an Information Paper on the status of implementation of C/CAR/WG Conclusions in their respective State/Territory for review at each C/CAR/WG meeting, using a simple tabular format.

2.1.3 The Secretariat presented IP/03 with the conclusions of the C/CAR/DCA/6 meeting relevant to the C/CAR/WG for the information of the Meeting.

#### 2.2 Air Navigation Deficiencies

2.2.1 The Secretariat presented WP/03 with the current version of the ICAO database of the reporting form on air navigation deficiencies in the Central Caribbean area, including those that had been reported to have been corrected. The relevant Conclusions of the C/CAR/DCA/6 (Bahamas, July 2003), GREPECAS/11 (Brazil, December 2002) and NACC/DCA/1 (Cayman Islands, October 2002) Meetings and ICAO State Letter M 6/1-02/79 dated 27 September 2002 requesting States to prepare and submit to ICAO an Action Plan for the correction of deficiencies were discussed.

2.2.2 The Meeting noted that Action Plans had been received in the ICAO NACC Regional Office from the following C/CAR States/Territories in the specified fields as of 31 December 2003: All Areas : Cayman Islands; AGA: Aruba, Cuba and Netherlands Antilles.

2.2.3 Updated information was received by the Secretariat from Cuba and Dominican Republic in relation to corrected deficiencies. An Ad hoc Group was also established comprising the Dominican Republic and ICAO. The Group developed an Action Plan for the resolution of outstanding air navigation deficiencies reported for Dominican Republic, which is included in **Appendix B** to this part of the report.

2.2.4 Cuba presented NI/08 Rev. with an Action Plan for the resolution of air navigation deficiencies in that State, which is shown in **Appendix C** to this part of the report.

#### 2.3 CNS/ATM Systems

2.3.1 The Meeting agreed to incorporate item 2.3 of Agenda Item 2 - *CNS/ATM Systems* into item 3.1 of Agenda Item 3 – *Air Traffic Management (ATM)*.

#### APPENDIX A

#### STATUS OF OUTSTANDING CONCLUSIONS AND DECISIONS OF PREVIOUS MEETINGS OF THE C/CAR WORKING GROUP

FIELD	CONCLUSION/DECISION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
ATM	CONCLUSION 1/10 agreed as: CONCLUSION 5/9 USE OF MINIMUM LONGITUDINAL SEPARATION OF 10 MINUTES AND/OR 80 NM RNAV IN THE CARIBBEAN REGION That, a) Central Caribbean States that have not yet done so, take the necessary measures to implement, on the AIRAC date 12 July 2001, the minimum longitudinal separation of 10 minutes and/or the 80 NM RNAV*; b) review and update the operational letters of agreement in force between the interested ACCs, bearing in mind the safety levels to be maintained when applying said separation; and c) that this implementation be carried out by means of bilateral contacts and/or by using the good offices of the NACC Regional Office of ICAO. * The Mach number technique will be applied in order to ensure the minimum longitudinal separation. RNAV separation will be applied to those aircraft that are equipped with this capacity.	States / Territories States / Territories States / Territories / ICAO	Superseded by C/CAR/WG/3 Conclusion 3/7	Superseded
ATM	CONCLUSION 1/15 agreed as: CONCLUSION 5/13 IMPLEMENTATION OF ACAS II IN THE CENTRAL CARIBBEAN That the Central Caribbean States / Territories take necessary measures to promulgate national regulations to allow them to adopt the International Standard of ACAS II implementation as indicated by Annex 6, Part I, paragraph 6.18.	States / Territories	Cuba and Haiti reported to have implemented.	Valid

FIELD	CONCLUSION/DECISION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS	
ATM	CONCLUSION 1/16 agreed as: CONCLUSION 5/14 MANDATORY USE OF PRESSURE ALTITUDE REPORTING TRANSPONDERS That: a) the Central Caribbean States / Territories take necessary measures to promulgate national regulations to allow them to adopt the International Standard to implement the mandatory use of Pressure Altitude Reporting Transponders (SSR Mode C) as indicated in Annex 6, Part I, International Commercial Air Transport – Aircraft, paragraph 6.19; Part II International General Aviation – Aircraft, paragraph 6.13 and Part III, Helicopters, paragraph 4.15; and b) that the ICAO NACC Regional Office prepare a questionnaire and send it to the C/CAR States / Territories in order to obtain information on the status of adoption, publication and implementation of what was mentioned in a) above.	States / Territories	Cuba, Dominican Republic, Haiti, Jamaica and Netherlands Antilles reported to have implemented.	Completed	
CNS	CONCLUSION 1/18 Agreed as: CONCLUSION 5/16 AMENDMENTS TO AND IMPLEMENTATION OF THE REQUIREMENTS EXPRESSED IN CNS TABLES 1A AND 1B OF THE CAR/SAM ANP- FASID RELATED TO THE STATES / TERRITORIES OF THE CENTRAL CARIBBEAN That, a) the ICAO NACC Office follow up on the proposals to amend Table CNS 1A - AFTN Plan, as well as Table CNS 1C - ATS Direct Speech Circuits Plan, both of FASID ANP CAR/SAM, as shown in Appendixes A and B respectively; and b) States / Territories establish pertinent bilateral or multilateral arrangements so as to properly implement all the AFTN circuits requirements and ATS direct speech circuits required in accordance with the CNS Tables referred to in a) above.	NACC Office States / Territories	The NACC Office channeled the amendment through GREPECAS. The States/Territories have taken note of this Conclusion and proceeded accordingly.	Completed	

FIELD	CONCLUSION/DECISION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
CNS	CONCLUSION 1/22Agreed as:CONCLUSION 5/17REVIEW OF THE VHF AIR- GROUND VOICE COMMUNICATIONS COVERAGE IN THE CENTRAL CARIBBEANThat, States/Territories/International Organizations controlling Central Caribbean airspace provide, a) the ICAO NACC Regional Office information on their respective VHF air-ground voice communications stations according to the form shown in Appendix C that should be completed with a maximum period of 60 days; and b) calculated graphic coverage and/or in flight inspection measures.	States / Territories	The graphics coverage from Cuba and Jamaica were provided during the C/CAR/WG/3 Meeting. Aruba, Cayman Islands, Dominican Republic, Haiti, Netherlands Antilles and Turks and Caicos have sent this information to ICAO.	Completed
MET	CONCLUSION 1/31 agreed as: CONCLUSION 5/23 TRAINING FOR MET/ATS/CNS/AIS/SAR PERSONNEL That, a) the Directors of Civil Aviation of the C/CAR organize, in coordination with the MET authorities, a series of training activities for ATS/CNS/AIS/SAR and aeronautical meteorological personnel covering the following issues: 1) operational coordination procedures concerning the provision of aeronautical MET service; 2) respective roles and responsibilities of ATS/CNS/AIS/SAR units and meteorological offices in the provision of aeronautical MET service; and 3) interpretation of aeronautical meteorological products available to ATS/COM/AIS/SAR units and meteorological offices, in order to ensure the safety of aircraft operations.	States / Territories / ICAO NACC Office	Dealt with under Agenda Item 3.5 WP/09.	Valid
MET	CONCLUSION 1/33 agreed as: CONCLUSION 5/25 OPMET INFORMATION EXCHANGE IN C/CAR STATES That, a) the Directors of Civil Aviation of the C/CAR Region implement, as soon as possible, Conclusion 9/6 formulated by the GREPECAS/9 Meeting on the establishment of coordination committees among AIS/ATM/CNS/MET/SAR units; and b) in support of this proposal, submit to the C/CAR WG for action, the established quality control mechanisms for OPMET exchange messages.	States / Territories	A reminder to States will be sent in March 2004 in order to comply with this exchange.	Valid.

FIELD	CONCLUSION/DECISION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
ATM	CONCLUSION 2/3STANDARDIZEDFORMATFORLETTERS OF AGREEMENTThat C/CAR States / Territories review and update their interfacilityATS Letters of Agreement using the standardized format, shown inAppendix C to this part of the Report, as applicable.	States / Territories	States/Territories should update their Letters of Agreement using the new format. Cuba reported to have implemented.	Valid
ATM and CNS	CONCLUSION 2/15       PREPARATION       OF       A       CENTRAL         CARIBBEAN       CNS/ATM         SUBREGIONAL PLAN         That C/CAR States/Territories through the C/CAR/WG develop a         Central Caribbean CNS/ATM Subregional Plan taking into account         their corresponding national Plans, the neighboring         States/Territories/International Organizations and the CAR/SAM         Regional CNS/ATM Implementation Plan	States / Territories and C/CAR WG	The C/CAR/WG/3 Meeting started the study of this item. Para 1.9 to 11 of its Report refers	Valid
AGA	DECISION 2/18       FOLLOW       UP       TO       THE         IMPLEMENTATION       OF         AERODROME CERTIFICATION IN         THE       C/CAR       STATES       /         TERRITORIES         That the C/CAR Working Group follows up on the compliance of         the aerodrome certification requirement on behalf of States /         Territories of the C/CAR States, for which a table was prepared         shown in the Appendix A to this part of the Report.	C/CAR WG	Superseded by GREPECAS Conclusion 11/11 and dealt with under Agenda Item 3.4 WP/08.	Superseded
AIS	CONCLUSION 3/1 ICAO REGIONAL AIS/MAP TRAINING That, ICAO considers increasing the number of ICAO regional educational events conducted in the AIS/MAP field in the CAR Region.	ICAO NACC Office	Training Centres have been urged to intensify AIS courses.	Completed
AIS	CONCLUSION 3/2 RESPONSES TO THE INVENTORY QUESTIONNAIRE ON THE STATUS OF IMPLEMENTATION OF THE WGS -84 That the Central Caribbean States/Territories are urged to complete the Survey Inventory Questionnaire on the status of the WGS -84 implementation and to submit it to the ICAO NACC Regional Office by 31 October 2003.	States/ Territories	Cayman Islands, Cuba and Dominican Republic have already sent their questionnaires to the NACC Office. Dealt with under Agenda Item 3.3 WP/07.	Valid

FIELD	CONCLUSION/DECISION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS	
AIS	CONCLUSION 3/3 ICAO AIP MODEL IN ELECTRONIC FORMAT That, ICAO be urged to consider the possibility of sending an electronic version (word processing or spreadsheet software) of the AIP Model (Appendix of Doc 8126) to States/ Territories by April 30th 2003, with a view to using it as a basis for the development of their respective AIP in new format.	ICAO NACC Office	The ICAO NACC Office sent the new AIP electronic file to Netherlands Antilles, Haiti and Bahamas whose AIPs including the new structure are pending to be edited	Completed	
AIS	CONCLUSION 3/4FULLIMPLEMENTATIONOFAIS/MAPSERVICESPRIORTOICAO USOAP ATS & AGA AUDITSThat, given the direct impact of complete, accurate and timely availability of AIS/MAP information in the required format, including WGS-84 coordinates, on the safety of aircraft operations, States/Territories shall complete full implementation of AIS/MAP Quality Assurance and Automation systems, including the Integrated Aeronautical Information Package, in preparation for the ICAO USOAP ATS and Aerodromes audits that are scheduled to commence in February 2004.	States / Territories	Cuba has developed its AIS QA and automation programme. In order to foster these programmes in the C/CAR, the C/CAR DCA/6 Meeting adopted Conclusion 6/4 to develop a technical cooperation project.	Valid	
ATM	<b>DECISION 3/5 C/CAR ATM TASK FORCE</b> A new C/CAR ATM Task Force is established, composed by members from Cayman Islands, Cuba, Haiti, Jamaica (Rapporteur), Netherlands Antilles and United States, deactivating the ATS routes Task Force and incorporating to the new Task Force created, the Work Programme of the deactivated Task Force.	C/CAR WG and States/ Territories	Directors of Civil Aviation should support the work of their ATM specialists in this Group	Completed	
ATM	<b>CONCLUSION 3/6 RVSM POINTS OF CONTACT</b> In support of GREPECAS Conclusions 11/26 and 11/27, that States/Territories of the Central Caribbean that have not yet done so, provide the points of contact for the ATS Service Provider and for the State Aircraft and Operator Approval Authority to the Rapporteur of the RVSM Task Force of the ATM Committee of the ATM/CNS Subgroup of GREPECAS through the ICAO NACC Office by 30 September 2003.	States/ Territories	Dominican Republic reported the following points of contact: ATM – Francisco Artiles OPS/AIR – Eddy Tineo.	Completed	
ATM	CONCLUSION 3/7 REVIEW OF ATS LETTERS OF AGREEMENT BETWEEN STATES/TERRITORIES AND VENEZUELA That ICAO, on behalf of the CAR States/Territories, urge Venezuela to cooperate in the review, coordination and implementation of ATS Letters of Agreement between Maiquetia ACC and Curacao ACC and San Juan ACC to include use of 10-minute/80 NM separations.	ICAO NACC Office, Netherlands Antilles, United States	ICAO had undertaken the coordination. Netherlands Antilles reported the LoA was expected to be effective on 10 June 2004. United States reported LoA coordination with Venezuela remained pending.	Completed	

FIELD	CONCLUSION/DECISION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
ATM	CONCLUSION 3/8 REVIEW OF THE CAR/SAM AND NAM REGIONS SSR CODE ASSIGNMENT SYSTEM The ICAO NACC and SAM Offices are urged to invite the States/Territories/International Organizations of the CAR/SAM Regions, to evaluate and consider the possibility of proposing an integral coordinated amendment to the SSR code assignment systems, with a view to resolving the problems and differences presented in the SSR code assignment systems used at the Houston Oceanic, Miami Oceanic and San Juan Oceanic airspaces with the SSR Code Assignment System established in the CAR/SAM ANP FASID for the rest of the FIRs of the CAR/SAM Regions.	ICAO NACC and SAM Offices	The NACC office circulated to the States Amendment NACC 03/01 ATM to the CAR/SAM Air Navigation Plan FASID approved by ICAO Council.	Completed
CNS	<b>CONCLUS ION 3/9 FASID CNS 4A TABLE UPDATE</b> That, in order to update the FASID CNS 4A table, States/Territories/International Organizations should send information related to the update of their primary and secondary radar facilities to the ICAO Regional Office no later than November 28, 2003.	States/ Territories/ International Organizations	Information received from Cuba, Dominican Republic and Jamaica during the C/CAR/WG/3 Meeting. Cuba reported to have implemented. Jamaica and Netherlands Antilles reported new radar services which require official notification to ICAO.	Valid
CNS	CONCLUSION 3/10 COMPLEMENTARY ACTIONS FOR THE IMPROVEMENT OF VHF/AMS COVERAGE IN THE CENTRAL CARIBBEAN That, in order to comply with GREPECAS Conclusion 10/29, States/Territories/International Organizations should send information related to their VHF/AMS Stations, and also graphical information regarding their VHF air-ground communications coverage to the ICAO NACC Office no later than 28 November 2003.	States/ Territories/ International Organizations	Cuba and Jamaica presented their graphic coverage during the C/CAR/WG/3 Meeting. Aruba, Cayman Islands, Dominican Republic, Haiti, Netherlands Antilles and Turks and Caicos have sent this information to ICAO.	Completed
CNS	CONCLUSION 3/11IMPLEMENTATION GROUND PORTIONOFATNGROUND PORTIONOFATNThat, ICAO urge the States/Territories/International Organizations to support the first ATN task force meeting and encouraging them to participate.OF	ICAO NACC Office	The ICAO NACC Office sent the invitation to States.	Completed

FOURTH CENTRAL CARIBBEAN WORKING GROUP MEETING (C/CAR WG/4) SUMMARY OF DISCUSSIONS APPENDIX A TO AGENDA ITEM 2

FIELD	CONCLUSION/DECISION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS
MET	CONCLUSION 3/12UPDATING OF FASID TABLES MET 2 AND MET 2A CONCERNING THE CENTRAL CARIBBEANThat the Civil Aviation Authorities of the States/Territories of the Central Caribbean, in coordination with their respective MET authorities, a) review the corresponding parts of the FASID Tables MET 2 and MET 2A of the FASID CAR/SAM, in order to update their requirements; and b) present to the ICAO NACC Regional Office the proposals for amendment duly documented, making use of the form included in Appendix A to this part of the Report by 28 November 2003.	States/ Territories	The ICAO NACC Regional Office has not received the proposals for amendment. Cuba reported no amendment required.	Valid
GEN	CONCLUSION 3/13 TERMS OF REFERENCE AND WORK PROGRAMME OF THE CENTRAL CARIBBEAN WORKING GROUP (C/CAR WG) That, the proposed amendments to the Terms of Reference and Work Programme of the Central Caribbean Working Group (C/CAR WG) be adopted as shown in the Appendix to this part of the Report.	States/ Territories	Approved by C/CAR/DCA's Conclusion 6/1.	Completed
GEN, MET and SAR	CONCLUSION 3/14 NEED TO STUDY AND APPLY SOLUTIONS TO THE EXISTING PROBLEMS IN THE C/CAR WORKING GROUP TO DEAL WITH MET AND SAR-RELATED MATTERS That, measures be studied and adopted to solve the problems of the lack of participation of MET and SAR experts in the work of the C/CAR Working Group, which is preventing the development of the tasks assigned related with MET and SAR matters.	States/ Territories	Refer to C/CAR DCA/6 Conclusions 6/9 and 6/10.	Completed

#### Agenda Item 3:Specific Air Navigation Activities and Developments

#### 3.1 Air Traffic Management (ATM) – C/CAR ATM TF

3.1.1 The Meeting considered that, in view that the contents of WP/04 and WP/05 were related, these should be discussed simultaneously in order to develop the operational requirements for RVSM implementation in automated ATM systems in the CAR Region. This would allow to conciliate the proposals formulated in both working papers. With this aim, the Meeting decided that the C/CAR ATM Task Force form an Ad hoc Group, to study and formulate a proposal to reflect the objectives of the aforementioned papers, taking into account the guidance proposed in the Appendix to WP/04.

3.1.2 During the discussions of the different subjects of this agenda item, the Meeting decided to also include for analysis and development by the aforementioned Task Force, the review on the establishment of new ATS routes in the Central Caribbean and the development of the Terms of Reference and Work Programme of the C/CAR ATM Task Force, as foreseen by the C/CAR/WG/3 meeting.

3.1.3 As a result of the review of the Ad hoc Group, the Meeting adopted the following Draft Conclusion on RVSM matters, to be circulated by ICAO to the C/CAR DCAs for urgent approval:

#### DRAFT CONCLUSION 4/2 GUIDANCE FOR THE STUDY OF RVSM OPERATIONAL REQUIREMENTS IN ATM AUTOMATED SYSTEMS

That, the States/Territories of the Central Caribbean:

- a) adopt the Guidance shown in the **Appendix A** to this part of the report;
- b) based on the aforementioned Guidance, they present the preliminary results to the 7th Meeting of ATM Authorities and Planners (AP/ATM/7) and the final results be presented to the 8<sup>th</sup> Meeting of that Group; and
- c) submit the results of item b) above to the ICAO NACC Regional Office.

3.1.4 Likewise, the Ad hoc Group considered it suitable to adopt the following Draft Conclusion urging the States/Territories to increase the efforts in order to effectively develop ATS Quality Assurance Programmes and ATS Contingency Plans in the C/CAR States/Territories:

#### DRAFT CONCLUSION 4/3 DEVELOPMENT OF ATS QUALITY ASSURANCE PROGRAMMES AND ATS CONTINGENCY PLANS IN THE CENTRAL CARIBBEAN

That States/Territories send to the ICAO NACC Regional Office by 30 June 2004:

- a) the status of implementation of the ATS Quality Assurance Programmes;
- b) the measures towards the solution of ATS incidents; and
- c) ATS contingency plans.

3.1.5 When reviewing WP/12, presented by Cuba, through which the implementation of ATS routes penetrating in the Havana FIR airspace was requested, the aforementioned ATM Ad hoc Group incorporated in its study other routes that have been studied by the C/CAR/WG and the results of this analysis is reflected in the following Draft Conclusion.

#### DRAFT CONCLUSIÓN 4/4 ATS ROUTES IN THE C/CAR AIRSPACE

That the C/CAR States/Territories agree that in order to conduct the corresponding procedure for ATS routes implementation prepared by the C/CAR ATM Task Force and endorsed by the C/CAR/WG, the proposal shown in **Appendix B** a this part of the report should be followed.

3.1.6 Finally, the ATM Ad hoc Group presented to the Meeting its Terms of Reference and Work Programme and the Meeting adopted the following Decision

#### DECISION 4/5 TERMS OF REFERENCE AND WORK PROGRAMME OF THE C/CAR ATM TASK FORCE

That in order for the C/CAR ATM Task Force to perform its assigned activities and tasks, it be governed by the Terms of Reference, Work Programme and Composition shown in the Appendix to Agenda Item 4 of this report.

3.1.7 The Meeting also deemed it suitable to adopt the recommendation of the Ad hoc Group reflected in the following Draft Conclusion, to be circulated by ICAO to the C/CAR DCAs for urgent approval:

#### DRAFT CONCLUSION 4/6 PARTICIPATION IN THE CAR/SAM RVSM TASK FORCE

That the States/Territories give full support to, and attend the CAR/SAM RVSM Task Force in the meetings/workshops of ATM Authorities and planners to ensure a seamless implementation of RVSM throughout the Region.

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3.1.8 Also under this agenda item, and for information of the C/CAR/WG, Cuba informed on the work carried out by its administration on SBAS/EGNOS augmentation trials reinforcing the regional development of the GNSS system, and it also highlighted the importance of participating in the technical co-operation projects such as the one developed to conduct the aforementioned trials. It also informed on its progress achieved in ATM matters.

3.1.9 Likewise, the Meeting was informed by the Secretariat on the progress carried out regarding language proficiency of ICAO, on the creation of the webpage created for this purpose, as well as on the symposium that will be held in Montreal in ICAO Headquarters from 1 to 3 September 2004.

#### 3.2 Communications, Navigation and Surveillance (CNS) – Radar Data Sharing and VHF/AMS Coverage TFs

3.2.1 The Secretariat presented WP/06 proposing for consideration by the Meeting actions for the follow-up and coordination of the improvement and implementation of the C/CAR CNS systems, based on the results of the review of the CNS agenda items of the C/CAR WG/3 and C/CAR DCA/6 Meetings, as well as the GREPECAS.

#### Radar Surveillance Systems

3.2.2 In relation to Doc. 8733 CAR/SAM ANP FASID Table CNS 4A on Surveillance Systems, Dominican Republic, Jamaica and Netherlands Antilles provided the Secretariat updated information, while Cuba reported it would do so by December 2004 once updated systems were implemented. **Appendix C** to this part of the report shows the C/CAR part of the updated Table CNS 4A.

#### VHF/AMS Communications Coverage

3.2.3 With regard to the review of VHF/AMS communications coverage, the Meeting took note of the issues identified by ICAO in reviewing the information submitted by States, namely the incompatibilities and inconsistencies in the information and the areas of poor coverage which were identified. The Meeting therefore adopted the following Decision:

#### DECISION 4/7 VHF/AMS COMMUNICATIONS COVERAGE

That the C/CAR VHF/AMS Coverage Task Force (Rapporteur – Jamaica), with the support of the ICAO Regional Office, review the pending VHF/AMS communications coverage issues and develop a regional action plan for their resolution to be presented at the C/CAR/WG/5 Meeting.

#### ATN Ground Portion Implementation

3.2.4 The Meeting agreed with the proposal to undertake a training event on ATN/AMHS and adopted the following Draft Conclusion:

DRAFT CONCLUSION 4/8 ATN/AMHS TRAINING

That, ICAO, if possible, coordinate with States/Territories to hold an ATN/AMHS training event in the 2004-2005 timeframe.

#### **Radar Data Sharing**

3.2.5 The Rapporteur of the C/CAR Radar Data Sharing Task Force reported to the Meeting that the Task Force had not progressed its activities due to inadequate support from States/Territories, the technical and legal complexity of the subject and the insufficient expertise and experience in the C/CAR area. The Rapporteur recommended that a Meeting of the Task Force was necessary to enable activities to commence, to which experts from other regions with the necessary expertise and experience would be invited. However, budgetary limitations, both for hosting such a Meeting, in terms of interpretation services, and for attendance by States/Territories and experts from ICAO and other organizations, in terms of travel and per diems, prevented this Meeting from being convened to date. The Rapporteur of the VHF/AMS Coverage Task Force expressed similar difficulties in that Task Force commencing work on the assigned tasks. The Secretariat therefore proposed that the schedule for the next C/CAR/WG/5 Meeting allocate time for meetings of all C/CAR Task Forces, which are subordinate to the C/CAR/WG. The Meeting agreed with the proposal and adopted the following Decision:

#### DECISION 4/9 C/CAR/WG TASK FORCE MEETINGS

That the C/CAR/WG/5 Meeting Schedule allocate three days for that Meeting and two days for all the C/CAR/WG Task Forces to meet simultaneously.

3.2.6 Nevertheless, the Meeting encouraged the Task Forces to progress in undertaking their assigned tasks by correspondence in much as possible and report on their activities at the next C/CAR/WG/5 Meeting. In this regard, the Meeting adopted the following Decision for the Radar Data Sharing Task Force:

#### DECISION 4/10 RADAR DATA SHARING

That the Radar Data Sharing Task Force (Rapporteur – Netherlands Antilles), with the support of the ICAO Regional Office, collect the required radar data sharing information from C/CAR States/Territories and neighbouring sub-regions by 31 May 2004, and develop a regional action plan for the implementation of radar data sharing to be presented at the C/CAR/WG/5 Meeting.

#### **3.3** Aeronautical Information Services (AIS)

3.3.1 Cuba presented WP/13 and the Meeting discussed the importance and need to reactivate the C/CAR AIS AUTO Task Force, renaming it as C/CAR AIS/MAP, on which there was consensus, and the Task Force was composed by Cayman Islands, Cuba (Rapporteur), Dominican Republic, Jamaica and United States. An Ad hoc Group was activated to define its Terms of Reference and Work Programme, and the following Decision was adopted:

3-4

#### DECISION 4/11 ESTABLISHMENT OF THE C/CAR AIS/MAP TASK FORCE

That, the C/CAR WG/4 approve:

- a) establishing a C/CAR AIS/MAP Task Force, which will begin its work as of this Meeting, and will perform its tasks primarily through the use of electronic mail; and
- b) that in order to develop the work of this Task Force, it will be governed by the Terms of Reference, Work Programme and composition shown in the Appendix to Agenda Item 4 of this report.

3.3.2 Likewise, when reviewing WP/07, and considering as a reference Conclusion 1/7 of the C/CAR/WG/1, the Meeting urged the States/Territories to make greater efforts to complete the implementation of the WGS-84 system and to convert the geographical coordinates to that system which supports the world air navigation.

3.3.3 The Meeting especially emphasized the need for establishing agreements among States to coordinate the determination of coordinates in the adjacent FIRs common points. The coordination would be carried out electronically through the C/CAR AIS/MAP TF in such a way that States exchange information on the boundary geographical coordinates. The ICAO NACC Regional Office will establish a programme of deadlines and will act as coordinator, supported by the aforementioned Task Force, in order to make the necessary follow-up and to oversee that the programme is complied with.

3.3.4 Based on the above, the following Draft Conclusion was adopted:

#### DRAFT CONCLUSION 4/12 FOLLOW-UP TO THE TOTAL IMPLEMENTATION OF WGS-84

That, considering that the RNAV and RNP systems, including RVSM, are in an advanced implementation phase, and that for their efficient application the strict accuracy and integrity of data on which they are based is required, the States/Territories of the C/CAR agree to:

- a) carry out a greater and more effective follow-up to the total implementation of the WGS-84 System;
- b) establish 30 November 2004 as the deadline for the total implementation of WGS-84 in the C/CAR area;
- c) develop technical assistance agreements of which the experience obtained by the States that have already implemented the system in their territories may be taken advantage;
- d) prepare a work programme among States with adjacent FIRs to determine the deadlines for the electronic exchange of the data related to geographical coordinates of the common points in the boundaries of the FIRs, their coordination, standardization and publication;

- e) charge the ICAO NACC Regional Office with the preparation of the programme and the follow-up of its compliance, as well as with the implementation of such coordinates, to that end, the C/CAR AIS/MAP TF, based on that programme, will comply with the task and will inform the forthcoming C/CAR DCA/7 Meeting; and
- f) in case of discrepancy among States, impossible to resolve by the C/CAR/AIS/MAP/TF, the ICAO NACC Regional Office will act as conciliator in order to achieve a prompt resolution to the discrepancy.

3.3.5 The Meeting also took note of NI/11 and praised the progress achieved by Cuba with regard to Automation, Quality Management, AIP, Data Base, WGS-84 implementation, digitizing aeronautical charts, as well as other aspects and experiences in the AIS/MAP field.

3.3.6 Likewise, the Meeting noted the offer repeatedly made by the Cuban delegation of facilitating the Automated System of Aeronautical Information (SAIA-3000) to the C/CAR States/Territories that so require, through bilateral co-operation agreements. To that end, the requests should be chanelled through the Vicepresident of the Cuban Civil Aviation Institute (IACC), Mr. Argimiro Ojeda Vives, at the following e-mail address: vp@iacc.avianet.cu.

#### 3.4 Aerodromes (AGA)

3.4.1 The Secretariat presented WP/08 on the status of progress in the implementation by the States of the aerodromes certification process, as well as the activities developed to date by ICAO, included in the Draft Work Plan for the expansion of the Universal Safety Oversight Audit Programme (USOAP). The opportunity was also taken to review the Table "Status of Aerodrome Certification Implementation in the C/CAR Region States/Territories as of Feb.2004". The revised report on the current status of aerodrome certification implementation included as **Appendix D** to this part of the report.

3.4.2 The Meeting was informed on the Aerodrome Certification Workshops conducted jointly by ICAO and the US FAA during the 2nd semester of 2003.

3.4.3 In terms of the Preliminary Preparatory Work Plan for the USOAP Programme expansion to the aerodromes field, it is noted that there will be some postponement in its implementation, due to a proposal for modification in the methodology of its development, which should be reviewed and approved by the 35th Session of the ICAO Assembly, which will be held in September 2004.

3.4.4 Dominican Republic, Jamaica and Netherlands Antilles commented on the implementation of the aerodrome certification process in those respective States/Territories, as well as its benefits, primarily in that it obligates States to resolve deficiencies effectively or else to commit to an action plan to overcome these based on a clearly defined programme.

#### 3.5 Aeronautical Meteorology (MET) – C/CAR MET TF

3.5.1 Cuba presented NI/12 on actions for the development of AERMET services in that State. These actions included carrying out a MET short course for personnel of other air navigation fields using MET services. Other States/Territories expressed an interest in the course and Cuba offered to make the course available. The Meeting therefore adopted the following Draft Conclusion:

#### DRAFT CONCLUSION 4/13 MET SHORT COURSE FOR AIR NAVIGATION PERSONNEL

That,

- a) Cuba send the MET short course material to the ICAO NACC Regional Office by 30 April 2004; and
- b) ICAO coordinate the possible translation and distribution to C/CAR States/Territories.

3.5.2 The Secretariat presented WP/09 informing the Meeting of the latest Transition Plan to the Final Phase of the WAFS in the CAR/SAM Regions as updated at the AERMET/SG/6 Meeting held in June 2003 and accepted for implementation by Conclusion 6/7 adopted by the C/CAR/DCA/6 Meeting held in July 2003. The paper also conveyed to the C/CAR/WG the Conclusion 6/9 adopted by the C/CAR/DCA/6 Meeting which established a C/CAR Met Task Force subordinate to the C/CAR/WG to deal with MET tasks assigned to the C/CAR/WG and contained in its Terms of Reference and Work Programme. In this regard, Cuba and Dominican Republic presented Flimsy/01 with a draft Terms of Reference and Work Programme for a C/CAR MET Task Force. The Meeting therefore adopted the following Decision:

#### DECISION 4/14 C/CAR MET TASK FORCE

A new C/CAR MET Task Force is established, composed by members from Cayman Islands, Cuba (Rapporteur), Dominican Republic and United States, with the Terms of Reference and Work Programme included in **Appendix** to Agenda Item 4 to this report.

#### **3.6** Search and Rescue (SAR)

3.6.1 The Secretariat presented WP/10 informing the Meeting that the C/CAR MCI/SAR Task Force subordinate to the C/CAR DCAs had ceased to exist and that in response to C/CAR/WG concerns regarding the lack of SAR expert participation and contributions to the C/CAR/WG, the Directors had adopted Conclusion 6/10 committing States/Territories to send SAR contributions and experts to the C/CAR/WG so that this Group may develop the SAR tasks assigned. The aforementioned paper proposed to continue the development and improvement of National SAR Plans and to develop a C/CAR SAR Plan, referring to the guidance material attached in **Appendix E** to this part of the report. 3.6.2 However, the Group once again noted that lack of participation of SAR experts in the Meeting, except for the delegate from the host State, and the lack of SAR contributions to the Meeting documentation, except for the Secretariat's paper. The Meeting recognized that it was unlikely that SAR experts would regularly attend C/CAR/WG Meetings and considered that the establishment of a C/CAR SAR Task Force, subordinate to the C/CAR/WG, which could work remotely and electronically, was the most effect methodology for ensuring that regional SAR tasks were undertaken with results presented to the C/CAR/WG Meetings. The Meeting therefore adopted the following Decisions:

#### DECISION 4/15 C/CAR SAR TASK FORCE

That a new C/CAR SAR Task Force be established, composed by members from Cuba, Dominican Republic (Rapporteur), Haiti, Netherlands Antilles and United States, which will develop its Terms of Reference and Work Programme by 30 April 2004 and to be presented at the next C/CAR/WG/5 Meeting.

#### DECISION 4/16 DEVELOPMENT AND INTEGRATION OF THE SEARCH AND RESCUE PLANS IN THE CENTRAL CARIBBEAN

That the C/CAR/WG, supported by the C/CAR SAR Task Force in coordination with the ICAO NACC Regional Office:

- a) continue to follow-up the development and improvement of National SAR Plans;
- b) develop an action plan for the development of a C/CAR SAR Plan to be presented at the next C/CAR/WG/5 Meeting; and
- c) incorporate SAR tasks in its Work Programme.

#### APPENDIX A

#### GUIDANCE FOR THE STUDY OF RVSM OPERATIONAL REQUIREMENTS IN ATM AUTOMATED SYSTEMS

#### Objectives

- a) Evaluate the impact of RVSM implementation on ATM automated systems.
- b) Provide information to facilitate ATM automation enhancements.
- c) Evaluate and identify other operational requirements of ATM automated systems

#### 1. Flight Data Processors

1.1 All flight data processors (FDP) should be designed to facilitate access to filed flight plans (FPL), repetitive flight plans (RPL) and current flight plans (CPL), whether the flight plan was transmitted via AFTN by users of the air navigation services or by other methods.

1.2 FDPs must have a method of notifying ATC of flight plans that have been received with erroneous or incorrect information in order to allow ATC to take appropriate action.

1.3 Modifications to FDPs for RVSM should also take into consideration the impact of other advanced aircraft capabilities, the emerging and future requirements of the ATM system, and interoperability with neighboring automated systems.

1.4 The FDP should provide ATC with easily observed information regarding the flight's RVSM approval status, as well as the ability to amend the flight plan should the aircraft's RVSM status change while en route. This includes displaying /W in item 10 of the flight plan or STS/NONRVSM in item 18 for non-RVSM approved aircraft requesting special handling in the RVSM stratum.

#### 2. Flight Plan Templates

2.1 If a simplified flight plan form is used by an ATS provider, ensure all necessary information is displayed to ATC and all applicable information is transmitted to adjacent facilities.

#### 3. Automated ATS Messages

3.1 ATS providers should consider the future use of additional ATS messages, such as change, estimate, coordination and acceptance (CHG, EST, CDN and ACP, respectively) as these may provide benefits for exchanging automated messages among adjacent facilities.

#### 4. Flight Plan Messages

4.1 FPL and CPL messages exchanged between ATC units should facilitate the coordination of the aircraft's RVSM status.

4.2 ATC units and operators using RPLs should regularly review the information contained in the RPL for accuracy, including the RVSM status in items 10 and/or 18 (if applicable).

#### 5. Flight Progress Strips

5.1 Printed flight progress strips should display the RVSM status of all flights operating in the RVSM stratum. Indications should include, at a minimum, a W in item 10 if the aircraft is RVSM approved, and STS/NONRVSM in item 18 if the aircraft is not approved for RVSM operations and is requesting special handling in the RVSM stratum. Additional indications may be useful to controllers such as highlighting the assigned altitude on strips of non-RVSM approved aircraft.

5.2 Electronic flight progress strips should also readily display the RVSM status of all flights operating in the RVSM stratum. Indications should include, at a minimum, a W in item 10 if the aircraft is RVSM approved, and STS/NONRVSM in item 18 if the aircraft is not approved for RVSM operations and is requesting special handling in the RVSM stratum. Additional indications may be useful to controllers, such as using color to highlight the assigned altitude, using color to highlight STS/NONRVSM, etc.

#### 6. **Radar Data Processors**

6.1 The radar data processor (RDP) should properly display the RVSM status of aircraft operating in or adjacent to the RVSM stratum. This can be accomplished by several methods, such as different target symbols, color applied to all of or part of the data block, etc. ATC providers should consider using filters so that as aircraft approach the RVSM stratum, the symbol or color change occurs.

6.2 If an aircraft's RVSM status is amended while en route, the update must be reflected in the radar display.

#### 7. **Conflict Alert**

7.1 The short term conflict alert (STCA) function should respond correctly based on the RVSM status of the aircraft involved and the stratum the aircraft are operating within.

Above FL410	All aircraft	2000 ft
FL290 - FL410	RVSM vs. RVSM	1000 ft
	RVSM vs. non-RVSM	2000 ft
Below FL290	All aircraft	1000 ft

7.2 In addition, Mode C visual/audio alert systems should be re-programmed to notify ATC when an aircraft deviates from its assigned altitude by 200 ft in the RVSM stratum.

#### 8. **Controller Training**

8.1 ATC providers should modify their training programmes and/or simulators to reflect the changes implemented in their flight and radar data processors. This will facilitate controller training.

8.2 ATC providers should consider the scheduling of controller training to best ensure all controllers are familiar with RVSM. Required training should be completed as close to RVSM implementation as possible.

#### **APPENDIX B**

#### ATS ROUTES IN THE C/CAR AIRSPACE

The following ATS Routes were reviewed and related decisions were adopted as follows:

a) **Panama City/ San Juan** Status: previously agreed – concluded.

1

- b) **Santiago de Cuba/Port au Prince** Status: implementation of this route is agreed with a modification of the trajectory as follows:- UCU(VOR) direct GABUN direct PAP (VOR)
- c) **Santiago de Cuba/Montego Bay** Status: implementation of this route is agreed with an extension to Great Inagua to facilitate Atlantic traffic in/out bound Montego Bay, trajectory is as follows:- SIA(VOR) direct UCU(VOR) direct UMO(NDB) direct ZIN (NDB). Note that it was agreed that no reporting point is required to be established on the common Havana/Miami FIR boundary due to existing procedures contained in their LOAs.
- d) Santiago de Cuba /Cap Haitien Status: not feasible withdrawn.
- e) Cap Haitien/Puerto Plata Status: pending -further coordination required.
- f) **Kingston/Great Inagua:** Status: Implementation of this route is agreed with the modification of trajectory as follow:- MLY (VOR) direct BYGON direct ZIN (NDB).
- g) Cabo Codero/Miami (UL304) Status: implemented.
- h) **Realignment of A315** Status: realignment of the segment between OBN (VOR) and VESKA was agreed between Haiti and Dominican Republic
- i) **Kingston/Santiago de Cuba** Status: implementation of this route is agreed with trajectory as follows: MCY (VOR) direct VCU (VOR).

2 The ATM Task Force agreed that detailed route changes are to be submitted to the ICAO NACC Office by March 15, 2004.

3 Proposed coordination procedures for A636: The Dominican Republic, Haiti and the United States discussed methods for improving efficiency on A636. Haiti agreed that Miami and Santo Domingo centers may provide radar services between RETAK and ALBEE (flight levels to be determined) and that the coordination fix for traffic on A636 and G444 would be TUMAR on the proviso that both Grand Turk and Las Americas secondary surveillance radars are operational. Final coordination procedures and an implementation schedule is to be determined by the States concerned.

4 The ICAO NACC Regional Office will coordinate the implementation of the above ATS routes proposal through the corresponding procedures.

#### Fourth Central Caribbean Working Group Meeting (C/CAR WG/4)

Summary of Discussions

#### Appendix C to Agenda Item 3

#### Table/Tabla CNS 4A - SURVEILLANCE SYSTEMS/SISTEMAS DE VIGILANCIA (Part/Parte C/CAR)

3C-1

State(Territory)/Location	ATS Unite Served		PSR	_			SSR	_		DS _	Remarks
Estado(Territorio)/Ubicación	Unidad ATS Servida	Function	Coverage	Status	Function	Modes	Coverage	Status	Туре	Status	Observaciones
		Función	Cobertura	Impl.	Función	Modos	Cobertura	Impl.	Tipo	Impl.	
			(NM)	Estado		(A,C& S)	(NM)	Estado		Estado	
	2	3	4	5	6	7	8	9	10	11	13
ARUBA (Netherlands)		_			_						
Aruba	Reina Beatrix APP	Т	80	I	Т	A/C	256	<b>I</b> *			*MSSR
BAHAMAS											
Nassau	Miami ACC Nassau APP	E/T		I	E	A/C		I			
CUBA											
Camagüey	Habana ACC	E/T		Ι	E/T	A/C	200	I/P*			*MSSR
	Camagüey APP										
Holguín	Habana ACC	E/T		Ι	E/T	A/C	200	I/P*			*MSSR
	Santiago de Cuba TMA										
	Holguín APP										
Menocal	Habana ACC	E/T		1	E/T	A/C	200	I/P*			*MSSR
	Habana APP										
	Varadero APP										
San Julián	Habana ACC	Е			Е	A/C	200	I/P*			*MSSR
Sta. Clara	Habana ACC	E/T			E	A/C	200	I/P*			*MSSR
Sta. Clara		E/ I		1	E	A/C	200	I/P			W55K
	Varadero APP										
DOMINICAN REPUBLIC											
Barahona	Barahona APP	т	70	Ι				I			
Puerto Plata	Puerto Plata APP	т	70	Ι				I			
Santo Domingo	Santo Domingo ACC	E/T	70	I	E/T	A/C	250	۱*			*MSSR
	Santo Domingo APP										
HAITI											
	Port-au-Prince ACC				E/T	A/C		P*			*MSSR
	Port-au-Prince APP										
		Ŧ	<u> </u>		БÆ	A/0	050	1*			*14000
Kingston	Kingston APP	T T	60		E/T	A/C	250	l*			*MSSR
Montego Bay	Montego Bay APP	Т	60	1	Т	A/C	250	I*			*MSSR
Mount Denham	Kingston ACC	E	120	I	E	A/C	250	<b>I</b> *			*MSSR
NETHERLANDS ANTILLES (Netherlands)											
Willemstad	Curaçao ACC	Е	120	I	Е	A/C	256	<b>I</b> *			*MSSR
	Curação APP		120				200				moort
Saint Maarten	Juliana APP	т	60	I	т	A/C	256	<b>I</b> *			*MSSR
Samualanen	Juliana APP	I	60	1	I	A/C	200	1			INISSK
PUERTO RICO (USA)											
San Juan	San Juan ACC	E/T		Ι	Е	A/C		I			
	San Juan APP										
						ļ				$\left  \right $	
TURKS & CAICOS IS. (UK)					_						
Grank Turk	Miami ACC				E	A/C		I		$\square$	
VIRGIN IS. (USA)											
Saint Thomas	San Juan ACC	E		I	E	A/C		I			

State(Territory)/Location	ATS Unite Served		PSR				SSR		AD	DS	Remarks
Estado(Territorio)/Ubicación	Fourth Central Conductor		an Wor					WG/4) Status	Туре	Status	Observaciones
		Funcion	iennary	v off <sub>p</sub> Di	cussio	ns <sub>Modos</sub>	Cobertura	Impl.	Tipo	Impl.	
		App	endix, C	testadg	nda Ite	n,A,∂&s)	(NM)	Estado		Estado	3C-2
1	2	3	4	5	6	7	8	9	10	11	13

Aerodi	Aerodrome Certification Implementation in the C/CAR Region States/Territories as of February 2004					
State/Territory	Certification System Implementation Progress/Status	Certification Commencement Date	Remarks			
Aruba	Implemented					
Bahamas	No information	?				
Cuba	Implemented					
Dominican Republic	The aerodrome certification regulations are being processed by the Government through the Aviation Authority. Also, the airport administrations are completing the development of their Aerodrome Operations Manuals to formally request to the Aviation Authority the commencement of the certification process for their international aerodromes.	2004				
Haiti	The regulations for aerodrome certification and the licensing system are in preparation	2004				
Jamaica	Implemented					
Netherlands Antilles	Implemented					
United Kingdom <sup>3</sup> Cayman Islands Turks and Caicos	A partial aerodrome certification/licensing system is in place which will be replaced by new regulatory powers and systems including aerodrome certification.	2004				

(1) CARICOM member States of Regional Aviation Safety Oversight System (RASOS) have approved the establishment of an Aerodrome Certification Working Group (AC/WG) to provide support to States for aerodrome certification to be implemented by 27 November 2003 and prepare for ICAO USOAP Aerodromes audits.

(2) The United Kingdom Civil Aviation Authority has established the Air Safety Support International (ASSI) to help provide a civil aviation safety regulation system in the UK Overseas Territories. It is responsible for supporting the Territories' existing authorities in the safety regulation of all aspects of civil aviation, including the licensing of personnel and the certification of aircraft, airlines, airports and air traffic control.

# **APPENDIX E**

# GUIDANCE MATERIAL FOR THE DEVELOPMENT OF A SAR REGIONAL PLAN

# CHAPTER 1. GLOBAL SCOPE

1.1 The ICAO and IMO's objective is to provide an effective world wide system, so that wherever people sail or fly, SAR services will available if needed. To that end, it is necessary to consider national SAR efforts as an integral part of a worldwide SAR system that will affect the overall approach a State will take to establish, provide and improve SAR services.

1.2 In most areas of the world, the fastest, most effective and practical way to achieve this goal is to develop regional systems associated with each ocean area and continent. This differs from the approach whereby every State independently establishes a complete stand-alone SAR system with geographic areas of responsibility acceptable to their neighbouring States, the collection of which will comprise the global system. However, the regional approach does require the States associated with an ocean or land area to collaborate and cooperate to develop and operate the regional system.

1.3 Global aspect of SAR is based in traditional humanitarian obligations, founded in international law. A distress situation can occur anywhere at any time; an aircraft in flight emergency may take place over long distances, likewise a person in distress at sea may drift a considerable distance. In both incidents, the emergency location may cross one or more SRRs. Regional scope eliminates the need for each State to provide SAR services for its own citizens wherever they travel worldwide. Instead, the globe is divided into SRRs, each with associated SAR services which assist anyone in distress within the SRR without regard to nationality or circumstances.

1.4 The establishment of global SAR system is intended to ensure that all persons in distress will be assisted regardless of their nationality or circumstances and wherever they may be found. Annex 12, Search and Rescue, to the International Civil Aviation Organization Convention and IMO's International Convention on Maritime Search and Rescue are the primary documents for establishing SAR service requirements.

1.5 State provisions for SAR services should be viewed as part of a global safety system. To this end, the States concerned with particular land mass or ocean area should cooperate to use all available resources in assisting persons in distress.

1.6 SAR systems can be established on a national or regional level, o4 both. Either way, the process involves establishment of one or more SRRs, along with capabilities to receive alerts, and to coordinate and conduct SAR services within each SRR via an RCC. Each SRR needs an RCC, but each State does not necessarily need an SRR if one RCC can be supported by and serve more than one State. This is especially true in ocean areas.

1.7 A regional approach can reduce cost and improve distribution of distress alerts, coverage and services. For example, it is less operationally complex, and more economical and effective, for States within a region to share the use and support of long-range terrestrial and satellite communications facilities and communications registrations databases to support SAR. States can sometimes support each other with SRUs to reduce the total number of units needed for adequate coverage and readiness. Training and other types of resources can be shared to everyone's benefit.

1.8 Establishment of national or regional SAR systems is typically based on development of multilateral national or regional plans, agreements, etc. to suit the desires and needs of the States involved. These documents may discuss establishment of RSCs, equivalent arrangements in lieu of establishing SRRs, etc. but usually provide for:

- effective use of all available resources for SAR;
- delineation of SRRs;
- description of relationships between the parties:
- discussion of how higher level conventions, plans, agreements, etc. will be implemented and supported.

The basic requirements for developing an effective SAR system include:

- legislative establishment of the SAR service(s();
- arrangements for use of all available resources, and provision of others if necessary;
- establishing geographic areas of responsibility with associated RCCs and RSCs;
- staffing, training and other personnel support to manage and operate the system;
- adequate and functioning communications capabilities; and
- agreements, plans and related documents, to achieve goals and define working relationships.

# CHAPTER 2NATIONAL AND REGIONAL SYSTEM

Establish:

- 2.1 BROAD PERSPECTIVE
- 2.2 REGIONAL PLANNING

- 2.3 ASSESING NATIONAL AND REGIONAL NEEDS
- 2.4 PLANNING PROCESS
- 2.5 PLANNING ACTIVITIES
- 2.6 GOALS TO IMPROVE THE SAR REGIONAL SYSTEM
- 2.7 OBJETIVES TO SUPPORT SAR GOALS
- 2.8 LONG RANGE PLANNING
- 2.9 SAR OPERATIONAL PLAN
- 2.10 SAR DOCUMENTS

# CHAPTER 3 SAR REGIONAL ORGANIZATION

## Define:

- 3.1 MANAGING RESOURCES TO MEET REQUIREMENTS
- 3.2 ESTABLISHMENT OF RCC'S AND RSC'S
- 3.3 MAXIMIZING SYSTEM EFFECTIVENESS AND BENEFITS
- 3.4 MANAGING FOR SUCCESS (QUALITY MANAGEMENT SYSTEM QMS)
- 3.5 IMPROVING SAR SERVICE

# <u>CHAPTER 4</u> <u>GENERAL STAFF CONSIDERATIONS</u>

#### Define:

- 4.1 SAR REGIONAL STRUCTURE
- 4.2 LEGISLATIVE SUPPORT
- 4.3 LEADERSHIP AND OPERATIONS
- 4.4 SAR SYSTEM ASSESMENT
- 4.5 DATA REQUIREMENTS
- CHAPTER 5 RESOURCES

## Agenda Item 4: Review of the Terms of Reference and Work Programme

4.1 The Secretariat presented WP/11 and the Meeting reviewed and updated the Work Programme of the C/CAR/WG in order to take into account the results of the review of Agenda Item 3 and the development of new, and modification of existing, Task Force work programmes, as shown in the **Appendix** to this part of the Report. The Meeting therefore adopted the following Draft Conclusion:

## DRAFT CONCLUSION 4/17 C/CAR WORKING GROUP WORK PROGRAMME

That, the C/CAR/WG Work Programme be updated as shown in the Appendix to this part of the Report.

4.2 In relation to the Task to develop a C/CAR CNS/ATM Implementation Plan, also contemplated by the C/CAR/WG Conclusion 2/15, the Meeting noted the lack of a regional body to undertake this task for C/CAR States/Territories, similar to IACL which has developed an E/CAR CNS/ATM Plan and COCESNA which has developed a Central America CNS/ATM Plan. In the absence of any State/Territory offering to undertake this task, it was apparent that no work would be carried out before the next C/CAR/WG Meeting. The Meeting considered it appropriate for ICAO to propose an action plan to the C/CAR/WG and therefore adopted the following Draft Conclusion:

# DRAFT CONCLUSION 4/18 C/CAR CNS/ATM IMPLEMENTATION PLAN

That, ICAO coordinate with States/Territories to study options and prepare a proposed action plan for the development of a C/CAR CNS/ATM Implementation Plan to be presented to the C/CAR/DCA/7 Meeting and guide the C/CAR/WG in carrying out this assigned task.

#### APPENDIX

#### DRAFT UPDATED TERMS OF REFERENCE AND WORK PROGRAMME OF THE CENTRAL CARIBBEAN WORKING GROUP (C/CAR WG)

#### 1 Background

The Central Caribbean Working Group was established by Conclusion 4/10 of the Fourth Meeting of Directors of Civil Aviation of the Central Caribbean, held in the Cayman Islands from 17 to 20 May 2000, to deal with the development of air navigation systems/service issues in the Central Caribbean. The aforementioned Meeting also agreed that ICAO should assist in the establishment of the Working Group and provide Secretariat services. A draft of the Terms of Reference and Work Programme was circulated to States/Territories/International Organizations of the Central Caribbean inviting them to nominate their respective member to the Working Group. The Meeting also felt it necessary to transfer the work of the C/CAR ATS Task Force to the Central Caribbean Working Group, incorporating it into its tasks.

The First Central Caribbean Working Group Meeting (C/CAR WG/1) was held at the ICAO NACC Regional Office in Mexico City, from 19 to 23 February 2001. The Second Central Caribbean Working Group Meeting (C/CAR WG/2) was held in Pétion Ville, Haiti, from 18 to 22 February 2002. The Third Central Caribbean Working Group Meeting (C/CAR WG/3) was held in Willemstad, Curaçao, Netherlands Antilles from 24 to 28 March 2003.

#### Conclusion 4/10 Establishment of the Central Caribbean Work Group (C/CAR/WG)

That,

- a) an informal work group dealing with the air navigation areas be established for the Central Caribbean;
- b) the ICAO Regional Office prepare the Terms of Reference and Work Programme for the work group and provide Secretariat services;
- c) the ICAO Regional Office, by 30 July 2000, should circulate the Terms of Reference and Work Programme for the work group to all States/Territories in the Central Caribbean as well as to relevant International Organizations for comments and invite the nomination of members of the working group;
- d) the work of the C/CAR ATS Task Force be incorporated into the tasks of the work group and that the ATS Task Force be disbanded, with the appropriate note of gratitude being sent to its members by the ICAO Regional Office on behalf of the States/Territories of the Central Caribbean; and
- e) a meeting of the work group be scheduled prior to the Fifth Meeting of the C/CAR Directors of Civil Aviation.

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#### 2 Terms of Reference

- a) The Central Caribbean Working Group (C/CAR WG) will examine on a continual basis the sub-regional problems in all fields of Air Navigation (AIS/AGA/ATM/CNS/MET/SAR) for States and Territories within the geographic limits of the Curaçao, Havana, Kingston, Miami Oceanic, Houston Oceanic, Nassau, Port-au-Prince, and Santo Domingo FIRs;
- b) The C/CAR WG will promote, coordinate and follow-up the implementation of the AIS/AGA/ATM/CNS/MET/SAR requirements established in the CAR/SAM Air Navigation Plan of the States/Territories in its area of responsibility and in compliance with GREPECAS conclusions and the ICAO SARPs; and
- c) The C/CAR WG will identify and propose actions to correct the air navigation systems/services deficiencies affecting international civil aviation in its area of responsibility.

#### **3** Objectives

The objectives of the C/CAR WG in each air navigation field are as follows:

#### Aerodromes (AGA)

To study AGA issues and recommend actions to be implemented associated with the planning and implementation of regional developments related to airport operations, physical characteristics, facilities, services and safeguarding in relation to airport safety, security and efficiency, as well as environmental protection at and around airports.

#### Communications, Navigation and Surveillance (CNS)

To study CNS issues associated with solutions to deficiencies, the planning and implementation of regional developments related to communications, navigation and surveillance systems, proposing action plans and contributing to the coordination and follow-up of their implementation.

#### Air Traffic Management (ATM)/Search and Rescue (SAR)

To study ATM and SAR issues and recommend actions, to contribute to the coordination and follow-up associated with the planning and implementation of regional developments related to airspace management (ASM), air traffic services (ATS), air traffic flow management (ATFM), search and rescue (SAR) and the ATS quality assurance programmes.

#### Meteorology (MET)

To study MET issues and recommend actions to be implemented, contributing to the coordination and follow-up associated with the planning and implementation of regional developments related to observation, forecasting and exchange of operational meteorology (OPMET) information, functioning and utilization of WAFS.

#### Aeronautical Information Services (AIS)

To study planning and implementation of regional developments related to automation of aeronautical information services, aeronautical databases and the Integrated Aeronautical Information Package, as well as the standardization of aeronautical mapping and its evolution toward providing electronic formats and quality assurance programmes, proposing action plans and contributing to the coordination and follow-up of these issues.

#### 4 Work Programme

No.	Field	Task	Priority	Completion	Responsible
1	GEN 1	Review, promote, contribute to the coordination and propose relevant actions for the implementation of AIS/AGA/ATM/ CNS/MET/SAR requirements established in the CAR/SAM ANP.	А	Permanent	C/CAR WG
2	GEN 2	Review, propose actions and follow-up the implementation of the recommendations/conclusions of the CAR/SAM/3 RAN and the conclusions of GREPECAS related to all air navigations fields.	А	Permanent	C/CAR WG
3	GEN 3	Review the database of deficiencies in the AIS/AGA/ATM/CNS/MET/SAR fields for each State/Territory and propose corrective actions.	А	Permanent	C/CAR WG
4	AGA 1	Identify, evaluate and recommend actions to improve matters relating to operational safety in international Central Caribbean airport movement areas resulting from deficiencies in the AGA, ATS, CNS and OPS.	В	C/CAR WG/5	C/CAR WG
5	AIS 1	Resolve the discrepancies of the WGS-84 information published in the AIPs.	А	C/CAR/ DCA/7	AIS/MAP TF
6	AIS 2	Contribute to the coordination and follow-up of the total implementation of WGS-84 in the States/Territories in the Central Caribbean and adjacent regions.	А	30/11/04	AIS/MAP TF
7	AIS 3	Carry out the coordination, assistance and follow-up of the implementation of a standard AIS/MAP Quality Assurance System, in the Central Caribbean States/Territories.	А	C/CAR WG/5	AIS/MAP/TF

#### FOURTH CENTRAL CARIBBEAN WORKING GROUP MEETING (C/CAR WG/4) SUMMARY OF DISCUSSIONS APPENDIX TO AGENDA ITEM 4

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No.	Field	Task	Priority	Completion	Responsible
8	AIS 4	Impel, with the assistance of the ICAO NACC Office, training actions related with the correct application and effective compliance with the quality requirements of the aeronautical data established in the ICAO Annexes 15, 11 and 14, in support of the AIS/MAP Quality Management System.	А	February 2005	AIS/MAP TF
9	AIS 5	Recommend the necessary actions to develop and assist States/Territories with implementing the AIS Automation Plan and, developing the relevant databases.	А	Permanent	AIS/MAP TF
10	ATM 1	Follow up the 10-minute and/or 80 NM RNAV longitudinal separation.	А	10/06/04	ATM TF
11	ATM 2	Review the ATS Route Network in the Central Caribbean, recommend changes if required in coordination with the adjacent FIRs and recommend solutions to the congestion on some ATS routes crossing the sub-region.	А	C/CAR WG/5	ATM TF
12	ATM 3	Follow-up on the implementation of the mandatory use of the ACAS II in the Central Caribbean.	А	C/CAR WG/5	ATM TF
13	ATM 4	Study ATS incidents and propose the implementation of ATS quality assurance programmes in the Central Caribbean.	А	C/CAR WG/5	ATM TF
14	ATM 5	Study and propose solutions to the use of non- standard ATS phraseology and especially of the English language for the non-English speaking States in the Central Caribbean.	А	C/CAR WG/5	ATM TF
15	ATM 6	Examine and propose solutions to ATS staffing/training and administrative aspects of ATS units in the Central Caribbean.	В	C/CAR WG/5	ATM TF
16	ATM 7	Develop an action plan for the modernization of ATM automation systems considering flexibility and interoperability.	В	C/CAR WG/5	ATM TF
17	ATM 8	Review Letters of Agreement of ACCs in the Central Caribbean and adjacent FIRs, contribute to the coordination and recommend corrective actions if necessary.	В	Permanent	ATM TF
18	CNS 1	Review the VHF AMS (R) communications coverage in the Central Caribbean airspace and recommend actions for its development.	А	C/CAR WG/5	VHF/AMS Coverage Task Force
19	CNS 2	Assist and contribute to the coordination among the C/CAR States/Territories for the implementation of radar data sharing in the Central Caribbean.	В	C/CAR/WG/5	Radar Data Sharing Task Force
20	CNS 3	Conduct a study and recommend a plan for GNSS implementation, including its augmentation system.	В	To be determined	To be determined
21	CNS 4	Assist and contribute to the coordination and follow-up of the implementation of VHF air-ground data links (VDL).	В	To be determined	To be determined
22	CNS 5	Propose a C/CAR subregional action plan for the implementation of ATN and its applications, contributing to its coordination and follow-up.	В	To be determined	C/CAR WG

#### FOURTH CENTRAL CARIBBEAN WORKING GROUP MEETING (C/CAR WG/4) SUMMARY OF DISCUSSIONS APPENDIX TO AGENDA ITEM 4

No.	Field	Task	Priority	Completion	Responsible
23	CNS/ ATM 1	Identify and study ATM and CNS scenarios in the C/CAR Subregion with a view to improving and implementing these systems/services.	A	C/CAR/WG/5	C/CAR WG, ATM TF
24	CNS/ ATM 2	Contribute to maintaining up-to-date the National CNS/ATM Implementation Plans for the Central Caribbean States/Territories.	А	Permanent	C/CAR WG
25	CNS/ ATM 3	Develop a C/CAR CNS/ATM Implementation Subregional Plan	В	C/CAR/WG/6	C/CAR WG
26	MET 1	Identify training needs of all personnel that uses MET information in their operations, including the installation, maintenance and repair of high technology electronic meteorological equipment.	А	C/CAR WG/5	MET TF
27	SAR 1	Develop an Action Plan to introduce improvements to the National SAR Plans and develop a C/CAR SAR Plan	А	C/CAR/WG/5	SAR TF

# 5 Priority

- A High-priority Tasks on which work should be completed as soon as possible.
- **B** Medium priority Tasks on which work should be undertaken as soon as possible, but without detriment to Priority A tasks.
- C Low priority Tasks on which work should be undertaken as time and resources permit, but without detriment to Priority A and B tasks.

#### 6 Members

Aruba, Bahamas, Cayman Islands, Cuba, Dominican Republic, Haiti, Jamaica, Netherlands Antilles, Turks and Caicos Islands, United Kingdom, United States, ACI, IATA, IFALPA and IFATCA.

Note: Colombia, Mexico, Panama, Venezuela and COCESNA will be invited to attend C/CAR WG Meetings to deal with co-ordination issues with adjacent FIRs of the Central Caribbean.

#### 7 Chairman and Vice-Chairman of the C/CAR Working Group

The chairperson will serve a term of 3 years to provide continuity and a communications link between the ICAO NACC Regional Office and members of the C/CAR WG between meetings. A participant from the host State/Territory will be elected as vice-chairperson of the corresponding meeting.

The chairperson of the C/CAR Working Group will present the results of each meeting of the Group to the corresponding meeting of Directors of Civil Aviation of the Central Caribbean.

## 8 Task Forces

# C/CAR ATM TASK FORCE

#### 1. Terms of Reference

The C/CAR ATM Task Force is responsible to the C/CAR/WG for the review, assessment and analysis of all ATM related matters specifically delegated by the Working Group and to recommend/propose action plans to correct deficiencies and implement solutions.

#### 2. Work Programme

No	Task	Priority	Completion
1	Review Letters of Agreement between ACCs in the Central		
	Caribbean and update action if required.	В	Permanent
2	Review ATS Route issues and recommend changes/solutions if		
	required in coordination.	А	C/CAR WG/5
3	Follow-up on the implementation of the mandatory use of ACAS		
	II in the Central Caribbean.	А	C/CAR WG/5
4	Study ATS Incident Reports and propose solutions through		
	Quality Assurance Programmes.	А	C/CAR WG/5
5	Examine and propose solutions to ATS staffing/training and		
	administrative aspects of ATS units.	В	C/CAR WG/5
6	Study and propose solutions to the use of non-standard ATS		
	phraseology and especially of the English language for the non-	А	C/CAR WG/5
	English speaking States.		
7	Identify ATM matters relating to ATM/CNS implementation with		
	a view to improving and implementing these systems/services.	А	C/CAR WG/5
8	Follow-up on the implementation of 10 minute and/or 80 NM		
	RNAV longitudinal separation.	А	10 June 2004
9	Develop an action plan for the modernization of ATM		
	automation systems considering flexibility and interoperability.	В	C/CAR WG/5
10	Coordinate with the C/CAR Radar Data Sharing Task Force on	В	C/CAR WG/5
	the use of radar data for operational purposes.		

## 3. Priority

- A High-priority Tasks on which work should be completed as soon as possible.
- **B** Medium priority Tasks on which work should be undertaken as soon as possible, but without detriment to Priority A tasks.
- C Low priority Tasks on which work should be undertaken as time and resources permit, but without detriment to Priority A and B tasks.

# 4. Composition

Cayman Islands, Cuba, Haiti, Jamaica\*, Netherlands Antilles and United States

\*Rapporteur – Randolph Jones

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# C/CAR RADAR DATA SHARING TASK FORCE

## 1. Terms of Reference

Study and assist the C/CAR Working Group on the feasibility of implementing the radar data exchange in the Central Caribbean area based on the Surveillance Plan contained in Table CNS 4A of the FASID and the relevant GREPECAS Conclusions and Decisions with a view to proposing a Subregional C/CAR Radar Data Exchange Plan and to advising actions to arrange bilateral and multilateral agreements for the implementation of radar data exchange.

# 2. Work Programme

No.	Task	Priority	Completion date
1	Based on the updated information of the Surveillance Plan – Table CNS 4A corresponding to the Central Caribbean and neighbouring areas, to analyze the information of the radar facilities of the States/Territories/Organizations of the Central Caribbean and to compile their respective radar coverage diagrams at flight levels 12.000 for terminal area and 25.000 ft for en-route functions.		May 2003
2	Propose the primary and secondary radar data sources, as well as the ATS units that might benefit from the exchange of those radar data sources.		November 2003.
3	Develop an Action Plan for the implementation of radar data in the C/CAR area.		
4	Contribute to keep data up-to-date with any new implementation or change that may be produced with regards to the closing of any radar facility (during the working period of the Group).		
5	Conduct a cost/benefit analysis for the implementation of Sharing of Radar Data projects.		June 2004
6	Prepare a radar data exchange plan for the Subregion that allows to share resources for the use of a surveillance radar service in an efficient and safe manner.		October 2003
7	Develop and recommend a prototype Letter of Agreement for bilateral and multilateral agreements		November 2004
8	Assess the available information on traffic density in the FIRs and other airspace comprised within the Central Caribbean in order to recommend the use of radar as well as radar data exchange.		February 2004.
9	Assist and contribute to the coordination among the States and Territories of the Central Caribbean for the implementation of radar data exchange.		December 2005
10	Distribute the results of the Work Programme to the members of the Task Force of the Working Group for their consideration.		November 2003
11	Inform the 4 <sup>th</sup> Meeting of the Central Caribbean Working Group on the results of the work of this Task Force.		February 2004.

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# 3. Composition

Cuba, Jamaica, Netherlands Antilles\*, United States and IFATCA.

\* Rapporteur: Vilmo Pieter

# C/CAR VHF/AMS COVERAGE TASK FORCE

## 1. Terms of Reference

Review the information of the VHF/AMS Stations of the Area Control and Approach Services and to identify lack of coverage deficiencies and to recommend solutions.

#### 2. Work Programme

No.	Task	Priority	Completion
1	Review the VHF AMS (R) communications coverage in the Central Caribbean airspace and recommend actions for its development.	А	C/CAR WG/4

#### **3 Priority:**

- A High-priority Tasks on which work should be completed as soon as possible.
- **B** Medium priority Tasks on which work should be undertaken as soon as possible, but without detriment to Priority A tasks.
- C Low priority Tasks on which work should be undertaken as time and resources permit, but without detriment to Priority A and B tasks.

#### 4. Composition

Colombia, Haiti, Jamaica\*, United States and IATA

\* Rapporteur

4A-10

### C/CAR AIS/MAP TASK FORCE

## **1** Terms of Reference:

- a) To examine on a continual basis the sub-regional problems in the fields of Air Navigation related to AIS/MAP of States/Territories within the geographical limits of the Curaçao, Havana, Kingston, Miami Oceanic, Houston Oceanic, Nassau, Port-au-Prince, and Santo Domingo FIRs;
- b) To foster, coordinate and follow-up the implementation of the AIS/MAP requirements established in the CAR/SAM Air Navigation Plan of the States/Territories in the area of responsibility of the C/CAR WG, as well as the compliance with GREPECAS conclusions taking into account the ICAO SARPs;
- c) To identify and propose corrective actions to the AIS/MAP deficiencies affecting international civil aviation in the area of responsibility of the C/CAR WG; and
- d) To act as advisor group, within the C/CAR WG, for the Meeting of Directors of Civil Aviation in AIS/MAP aspects, and follow-up the implementation of the Conclusions approved by them in these areas.

No.	Task	Priority	Completion
1	Resolve, under the ICAO NACC Office coordination, the discrepancies of the WGS-84 coordinates of common points in the adjacent FIRs, published in the AIPs of the States/Territories of the Central Caribbean and their adjacent regions.	А	C/CAR DCA/7
2	Contribute to the coordination and follow-up of the total implementation of WGS-84 in the States/Territories in the Central Caribbean.	А	November 30 <sup>th</sup> 2004
3	Carry out the coordination, assistance and follow-up the implementation of a standard AIS/MAP Quality Assurance System, in the Central Caribbean States/Territories.	А	C/CAR/WG/5
4	Impel, with the assistance of the ICAO NACC Office, training actions related with the correct application and effective compliance with the quality requirements of the aeronautical data established in the ICAO Annexes 15, 11 and 14, in support of the AIS/MAP Quality Management System.	А	February 2005
5	Recommend the necessary actions to develop and assist States/Territories with implementing the AIS Automation Plan approved for the Central Caribbean, and developing the relevant databases.	А	Permanent

#### 2 Work Programme

#### FOURTH CENTRAL CARIBBEAN WORKING GROUP MEETING (C/CAR WG/4) SUMMARY OF DISCUSSIONS APPENDIX TO AGENDA ITEM 4

No.	Task	Priority	Completion
6	Review, promote, contribute to the coordination and propose relevant actions for the implementation of AIS/MAP requirements established in the CAR/SAM ANP.	А	Permanent
7	Review, propose actions and follow-up the implementation of the recommendations/conclusions of the CAR/SAM/3 RAN and the conclusions of GREPECAS related to the AIS/MAP fields of air navigation.	А	Permanent
8	Review the database of deficiencies in the AIS/MAP fields for each State/Territory and propose corrective actions.	А	Permanent

## **3 Priority:**

- A High-priority Tasks on which work should be completed as soon as possible.
- **B** Medium priority Tasks on which work should be undertaken as soon as possible, but without detriment to Priority A tasks.
- **C** Low priority Tasks on which work should be undertaken as time and resources permit, but without detriment to Priority A and B tasks.

## 4 Members:

Cayman Islands, Cuba<sup>\*</sup>, Dominican Republic, Jamaica, and United States.

<sup>\*</sup> Rapporteur: Mirta Crespo

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## C/CAR MET TASK FORCE

#### 1. Terms of Reference

- a) Assess the current status of the MET systems and services in the States/Territories of the Central Caribbean;
- b) Promote, coordinate and follow-up the implementation of the MET requirements established in the CAR/SAM Air Navigation Plan for the States/Territories in the C/CAR WG area of responsibility, as well as the compliance with GREPECAS conclusions considering the ICAO SARPs; and
- c) Identify and propose actions to correct the international civil aviation MET services deficiencies in the C/CAR WG area of responsibility.

#### 2 Work Programme

No.	Task	Priority	Completion
1	Identify training needs for all personnel that uses MET information in their operations, including the installation, maintenance and repair of high technology meteorological equipment.	А	C/CAR/WG/5
2	Follow-up on a regular basis OPMET information exchange and propose actions in order to achieve a high degree of reliability and efficiency in OPMET information exchange, in accordance with the requirements of the FASID Tables MET2A and MET2B (CAR/SAM ANP, Doc 9733).	А	C/CAR/WG/5
3	Develop a C/CAR MET Contacts Database	А	30 April 2004

## 3 Priority

- A High-priority Tasks on which work should be completed as soon as possible.
- **B** Medium priority Tasks on which work should be undertaken as soon as possible, but without detriment to Priority A tasks.
- C Low priority Tasks on which work should be undertaken as time and resources permit, but without detriment to Priority A and B tasks.

### 4 Composition

Fred Sambula (Cayman Islands), Guillermo Armengol (Cuba)\*, Enrique Reyes (Dominican Republic), Andrés Campusano (Dominican Republic), Steven Albersheim (United States).

\* Rapporteur

# C/CAR SAR TASK FORCE

Terms of Reference and Work Programme to be developed by 30 April 2004 and to be presented at the next C/CAR/WG/5 Meeting.

**Composition**: Cuba, Dominican Republic (Rapporteur), Haiti and United States.

Agenda Item 5:Next Meeting Site

5.1 The Secretariat presented IP/06 and according to the meeting host rotation programme, and in the absence of any alternative offer, the Secretariat informed the Meeting that the ICAO NACC Regional Office in Mexico City would host the next C/CAR/WG/5 Meeting, tentatively in February 2005.

Agenda Item 6: Other business

6.1 The Secretariat presented IP/07 with the latest schedule of the ICAO NACC Regional Office meetings, seminars, course and workshops for the information of the Meeting, and reminded the participants that the schedule is updated on a periodic basis, the latest version of which is always available on the ICAO web site.

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