



International Civil Aviation Organization

CAR/SAM Regional Planning and Implementation Group (GREPECAS)

**Eighth Meeting of the GREPECAS Aeronautical Meteorology Subgroup
(AERMETSG/9)**

Lima, Peru, 23 to 27 June 2008

AERMETSG/9 - WP/10

05/06/08

Agenda Item 9: Status of MET deficiencies (GREPECAS List of MET Deficiencies)

(Presented by the Secretariat)

Summary

This working paper presents information on regional activities carried out for the deletion, by the States, of the deficiencies of each one of the air navigation areas. An updated list of the MET deficiencies is also presented in this working paper.

References

- Uniform methodology for the identification, evaluation and reporting of air navigation deficiencies, formulated by the ICAO Council.
- GREPECAS/14 Report (San Jose, Costa Rica, 15 to 20 April 2007); and
- GREPECAS/13 Report (Santiago, Chile, 14 to 18 November 2005).
- Report of the Eighth Meeting of the Aviation Safety Board (ASB/8), Lima, Peru, 5 – 6 March 2008.

1. Introduction

1.1 According to their responsibilities and based on the Uniform methodology for the identification, evaluation and reporting of air navigation deficiencies, formulated by the ICAO Council, the Regional Offices, in coordination with the States and GREPECAS mechanism, have been periodically reviewing the status of implementation of the CAR/SAM Regional Air Navigation Plan, with a view to identifying and assessing air navigation safety aspects. Based on the results of this review, air navigation deficiencies are identified and then submitted to the ICAO Council, and reported to the States and user organizations involved.

1.2 The Regional Offices maintain the list of deficiencies updated and GREPECAS mechanism, through the Air Security Board (ASB), periodically reviews that list and recommends actions for resolving urgent air navigation deficiencies (U) in the CAR/SAM Regions. Likewise, the Regional

Offices in agreement with the States resolve the deficiencies, and make the follow-up on the recommendations of GREPECAS ASB.

2. Discussion

2.1 The existing deficiencies affecting the provision of air navigation services in the ICAO Regions, and the need for the States to implement programmes to resolve them, are a matter of constant concern and high priority for the ICAO Council. In this sense, it should be noted 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.

2.2 When reviewing deficiencies in its 14th Meeting, GREPECAS noted that many of the problems concerning deficiencies could be solved through better coordination between the States and their respective Regional Offices. It also recognised that the GANDD was the best tool to improve this coordination.

2.3 Likewise, the meeting noted that failure by States to update the GANDD could be due to the coordination of personnel responsible for this function. With this purpose, the meeting adopted Conclusion 14/59 for the designation of a National Coordinator, in order to facilitate administrative coordination of the Database with those responsible in each area of air navigation services of the States.

2.4 The Group also agreed that a complete review of GREPECAS deficiency system was necessary, including the procedures, database, database user's guide, etc., and that this review should be applied by the Regional Offices to all "U" deficiencies prior to 31 December 2007, using standardised criteria. Acting in this way would be in a position to identify "U" deficiencies with a high degree of certainty so that an extraordinary meeting of the GREPECAS Aviation Safety Board (ASB) could review the implementation of Conclusion 13/92 and safely apply *last resort action*. Based on the above, the meeting agreed to adopt Decision 14/60.

2.5 In this sense, the ASB carried out its Fourth Meeting from 5 to 6 March 2007 in Lima, Peru, and note was taken that with regard to Conclusion 14/59 - *National Coordinator Responsible for Updating the GREPECAS Air Navigation Deficiency Database*, the currently list available of National Coordinators responsible for updating the GANDD is being completed by the Secretariat and will be updated as necessary.

2.6 Regarding Decision 14/60 - *Procedures for Classifying and Addressing GREPECAS "U" Deficiencies*, the meeting was informed that a criterion for classifying "U" deficiencies was developed. This criterion recommended the application of the risk analysis approach currently used by the ICAO SMS official course. The idea is to consider all deficiencies with Risk Indexes **5A, 5B, 5C, 4A, 4B** and **3A**, respectively, with **frequent, occasional** and **remote** levels of probability and **catastrophic, hazardous** and **major** levels of severity as "U" deficiencies.

2.7 Information was provided to the meeting regarding efforts by the CAR and SAM Regional Offices to completely revise the method for presenting "U," "A" and "B" deficiencies in one report format. To achieve this goal, the way to capture information for the GANDD was reformulated. As a consequence, the former "A," "B," "C" and "D" Appendices used to report unresolved GREPECAS deficiencies are reduced to one appendix and "Corrected Deficiencies" are retained and presented only for statistical purposes.

2.8 In order that the Secretary of GREPECAS analyze the feasibility of applying the new classification procedure for “U” type deficiencies to classification of “A” and “B” air navigation deficiencies and present the results of the analysis to ASB/9, the Aviation Safety Board formulated Decision ASB/8/1.

2.9 The meeting also reviewed the reclassification of “U” deficiencies carried out by the Regional Offices according to the document “Procedures for Classifying and Addressing GREPECAS “U” Deficiencies. This Document is presented as **Appendix A** to this working paper, and after a long and fruitful discussion, the meeting formulated the following draft conclusion:

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**¹ to this Report) using the format presented as **Appendix E**² 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.*

2.10 The application of “last resort action,” as required by GREPECAS Conclusion 13/92 is under study and will be finalized after States and International Organizations reply to the requirements of Draft Conclusion ASB/8/2.

2.11 In accordance with paragraph 1.2.3.7 b) of GREPECAS Procedural Handbook, which says that “in the interval between meetings, the Secretariat should intensively use a available electronic means, with a view to expediting the approval and implementation process of the draft Decisions and Conclusions provided by the Contributory Bodies which, at the Secretariat’s discretion, need immediate attention” and in order to prepare the results for the forthcoming ASB/9 Meeting, Draft Decision ASB/8/01 and Draft Conclusion ASB/8/02 had been approved by States through the GREPECAS Fast Track procedure.

2.12 In this regard, the list of GREPECAS deficiencies contained in the database will soon be sent to all CAR/SAM States in order to determine the Risk Index for each one of them.

2.13 **Appendix D** to this working paper presents an updated list of MET deficiencies. It is important that the States participating at the meeting review the referred Appendices and if appropriate, present the information to update the list of deficiencies.

¹ Appendix D correspond to Appendix B to this working paper

² Appendix E correspond to Appendix C to this working paper

2.14 The meeting should also be aware of the importance of the user's feedback (IATA, IFALPA), regarding the reporting of deficiencies in order to reflect the real situation in the list of MET deficiencies.

2.15 Likewise, it is important that MET authorities contact the coordinator for the revision and classification of MET deficiencies.

3. **Action proposed**

3.1 The subgroup is invited to:

- a) review and update the list of MET deficiencies; and
- b) propose other actions resulting from the discussion of this working paper.

APPENDIX A

PROCEDURES FOR CLASSIFYING AND ADDRESSING “U” DEFICIENCIES IN THE AIR NAVIGATION FIELD

1 Introduction

1.1 The procedures described below establish the steps to be followed by States and the ICAO NACC/SAM Regional Offices for resolving “U” deficiencies in the air navigation field. These procedures, developed in compliance with GREPECAS Decision 14/60, contribute to the application of a Uniform Methodology for the identification, assessment and reporting of deficiencies, as approved by ICAO Council, and are included as **Appendix A**.

1.2 These procedures shall provide Regional Offices and States with a method to re-classify current deficiencies, update procedures for capturing data and reports, and improve the use of the web application associated with the GANDD database.

1.3 These procedures shall also facilitate the *review of deficiencies* with “U” priority with a view to implement GREPECAS Conclusion 13/92 in the application of last resort action.

2 Common Criteria for its Classification and Storage in the GANDD

2.1 Two main parts are identified in the integral treatment of deficiencies as shown below:

1. ICAO NACC and SAM Regional Offices through:
 - a) specific fields (AGA, ATM, AIM, CNS, MET, SAR);
 - b) administration of the database (GANDD) by the ICT section of each Regional Office; and
2. States that coordinate with the Regional Offices through Focal Points in accordance with GREPECAS Conclusion 14/59.

2.2 The identification and reporting process of deficiencies is as prescribed in the Uniform Methodology.

2.3 The process of deficiency classification requires an assessment for priority assignment. For this reason, the deficiency must be duly identified and reported. In this regard, the information from columns 1 to 6 from **Appendix B**, which is the report extracted from the GANDD, must be available in order for the GREPECAS mechanism to revise the status of “U” “A” and “B” deficiencies.

2.3.1 In accordance with the guidance provided in paragraph 4 of the Uniform Methodology, the Regional Office, in coordination with the State Focal Point, shall determine the Priority of the Requirement, which determines the priority of the deficiency. In order to determine whether or not a “U” deficiency exists, a risk analysis will be necessary. **Appendix C** provides criteria for use in this respect.

*Important Note: Every deficiency may represent a potential **hazard** to air navigation, which is associated to a specific **risk**. There are several methods of risk analysis, each of them specific to the case in question. In the ICAO Safety Management System (SMS) training courses, a risk analysis method is presented that is applicable to cases affecting safety and determines whether the risk is intolerable or tolerable, and whether it may be mitigated. Based on this, a concept is available to mainly provide assistance with prioritizing the requirements that could result in “U” deficiencies, since the case of SMS methodology is oriented to risks affecting safety.*

2.4 Once the deficiency is classified, coordination with the Focal Point will take place regarding the information required in columns 8, 9, 10, and 11 from Appendix B, and will then be entered into the GANDD database, notifying the State through the Focal Point.

Important note: If some fields of Appendix B are not completed, for example, fields in the Action Plan, the deficiency will be entered into the GANDD and a notation will be made in the Remarks field.

3 **Reports to be Presented to the GREPECAS Mechanism**

3.1 In accordance with the Uniform Methodology, the GREPECAS mechanism shall receive information on deficiencies from the Regional Offices, found in the attached **Appendix B**. Based on this information, the mechanism shall proceed with the Uniform Methodology procedures. In addition, the GANDD can provide statistical reports that the mechanism could require for analysis.

4 **Responsibilities in the Treatment of Deficiencies and Maintenance of GANDD**

4.1 Considering that the GANDD is a tool to manage the treatment of deficiencies, the procedures outlined below are applicable while the deficiency is registered and stored in the database.

Responsibility of the Regional Offices

- a) Review and, if necessary, reclassify existing deficiencies based on established procedures.
- b) Coordinate the validation, revision, and/or updating of data for deficiencies with Focal Points, and update the information in the GANDD, advising the Focal Points of changes.
- c) Review periodic reports from Focal Points on the status of resolution implementation for the deficiencies. Any missing data from the Action Plan shall have a high priority during the review.

- d) Review deficiencies with the Focal Point during visits carried out by Regional Officers according to the mission programme established by the corresponding Regional Office.
- e) Present the list of deficiencies for revision at each meeting of GREPECAS Subgroups and/or Committees or other informal meetings, such as implementation meetings.
- f) Present information and reports to the ASB and to GREPECAS regarding the status of deficiencies.

Responsibilities of States/Focal Points

- a) Review, at least quarterly, the deficiencies and their respective Action Plans, and give special attention to missing information from the Action Plan.
- b) Respond to all requests from the Regional Offices that may necessitate the revision/updating of the list of deficiencies without delay.
- c) Request the corresponding Regional Office to update the status of deficiencies through the web application form (see details in paragraph 6).
- d) Once the deficiency is corrected, inform the corresponding Regional Office of the area involved without delay.

5 Deficiency Resolution Follow-up

5.1 Regional Offices and Focal Points shall closely follow-up on the Action Plan to resolve deficiencies, and the GANDD database will be updated accordingly. The deficiencies with missing data, for example, those referred to the Action Plan, will have priority in the follow-up.

6 Procedures to Manage the GANDD Database, Based on the Existing Web Application

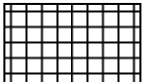
6.1 In October 2004, the procedures for access and use of the GANDD database were circulated to States so that States could report, review and update their corresponding deficiencies. In accordance with GREPECAS Decision 14/60, the Regional Offices have completely revised the procedures and structure of the GANDD in order to increase the efficiency of this tool. Updated procedures for Focal Points to interact with the database to revise and report amendments are attached as **Appendix D**. A presentation in power-point has been uploaded on the websites of each Regional Office for training purposes.

7 Complementary Measures

7.1 This document will be updated by the ICAO Regional Offices. Amendments shall be distributed to States via e-mail through the Focal Points.

APPENDIX B

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)

APPENDIX C

**FORMAT TO BE SENT TO STATES/TERRITORIES TO CARRY OUT RISK
ASSESSMENT AND ESTIMATE RISK INDEX**

Example

Area	State	Deficiency	Current Classification	Risk Index
AGA	Ecuador	Number and description	“U”	
		Number and description	“U”	
	Paraguay	Number and description	“U”	
	Panamá	Number and description	“U”	
	Suriname	Number and description	“U”	
		Number and description	“U”	
	Venezuela	Number and description	“U”	
		Number and description	“U”	
		Number and description	“U”	
		Number and description	“U”	

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD 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										
MET 7	CAR Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part 1, 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 19)	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		
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 1, 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 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
ABW Aruba										
MET 8	CAR Compliance with the requirements of WMO with regard to qualifications and training of aeronautical meteorology personnel (Annex 3, Part 1, Chapter 2, standard 2.1.5)	Aruba	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		

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1	2	3	4	5	6	7	8	9	10	11
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.	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		
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 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		
BRB Barbados										
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.	A	1. There is still a need for met information technology specialist. STATUS - Outstanding 2. A new Doppler radar will be installed in 2007, personnel will be trained to analyze imagery. - STATUS - To be completed in 2007. 3. There was never any need to increase aeronautical meteorologist. The Caribbean Meteorological Institute is located in Barbados and our MET Services has an adequate number of trained Meteorologist. - STATUS - Corrected	Barbados	DEC/ 2007	There is still a need for MET information Technology specialist.

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1	2	3	4	5	6	7	8	9	10	11

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 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	

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	The RVR of the Liberia airport has not been implemented	JUN/ 1996	Plan the acquisition of the RVR	B	To ensure the implementation of required RVR.	State	
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 Table MET 2A.	JUN/ 1996		A	Ensure that OPMET exchange is made in accordance with requirements of Table MET 2A.	States	
MET 85	CAR	Communications (Annex 3, Chap. 11, Standards 11.1.1, 11.1.2, 11.1.4).	Cosa Rica	These requirements are not being complied.	NOV/ 2007		A			
MET 87	CAR	Routine observations and reports (Annex 3, Part I, Chap. 4, Standard 4.3.2 a)	Costa Rica	The standard has not been implemented.	NOV/ 2007	Update personnel and implement the standard.	A		State	

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1	2	3	4	5	6	7	8	9	10	11
MET 89	CAR Special observations and reports (Annex 3, Chap. 4, Standard 4.4.2 a)	Costa Rica	The standard has not been implemented	NOV/ 2007	Update personnel and implement the standard.	A		State		
CUB Cuba										
MET 32	CAR CAR/SAM ANP MET Requirements, Table AOP 1.	Cuba	MUCO 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	
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 have 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 aircrafts. 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.

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1	2	3	4	5	6	7	8	9	10	11
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
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 . Personnel not qualified is making MET observations and reports	NOV/ 2007	Review the functions and training of the aeronautical meteorologist.	U	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 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		
MET 86	CAR Communications (Annex 3, Chap. 11, Standards 11.1.1, 11.1.2, 11.1.4)	El Salvador	These requirements are not being complied.	NOV/ 2007		A				
MET 88	CAR Special observations and reports (Annex 3, Chap. 4, Standard 4.4.2 a)	El Salvador	The standard has not been implemented.	NOV/ 2007	Update personnel and implement the standard.	A		State		
MET 91	CAR Routine observations and reports (Annex 3, Part I, Chap. 4, Standard 4.3.2 a)	Costa Rica	The standard has not been implemented.	NOV/ 2007	Update personnel and implement the standard.	A		State		

GRD Grenada

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1	2	3	4	5	6	7	8	9	10	11
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		
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 69 CAR	Exchange of OPMET information (ANP Basic CAR/SAM para. 35 to 19)	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		

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 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		

HTI Haiti

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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 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.	U	Ensure the correct elaboration of SIGMETs and their dissemination in accordance with the requirements of Table MET 2A.	State	APR/ 2003	
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 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		
HND Honduras										
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	U	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		

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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 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 80	CAR Establishment of aerodromes meteorological offices (Annex 3, Chapter 3, Standard 3.3.1) and Table MET 1A of CAR/SAM FASID.	Honduras	Toncontín aerodrome (HHTG) does not have a meteorological office.	SEP/ 2005		U		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 instalations for the MWO of Tegucigalpa.	SEP/ 2005		U		DGCA		
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 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		
MET 92	CAR Routine observations and reports (Annex 3, Part I, Chap. 4, Standard 4.3.2 a)	Honduras	The standard has not been implemented.	NOV/ 2007	Update personnel and implement the standard.	A		State		
MET 94	CAR Special observations and reports (Annex 3, Part I, Chap. 4, Standard 4.4.2 a)	Honduras	The standard has not been implemented.	NOV/ 2007	Update personnel and update the standard.	B		State		
MET 95	CAR Agreement between air traffic services authorities and meteorological authorities. (Annex 3, Chap. 4, Rec. 4.2)	Honduras	Deficient coordinations between ATS/MET units are deficient.	NOV/ 2007		A		DGCA/NMS		
MET 96	CAR METAR shall be issued one hour prior to the aerodrome resuming operations. (Annex 3, Chap. 4, Standard 4.3.3)	Honduras	METARs are issued when the aerodrome starts operation.	NOV/ 2007		A		NMS		

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IDENTIFICATION			DEFICIENCY				ACTION PLAN			
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1	2	3	4	5	6	7	8	9	10	11
MET 97 CAR	Meteorological offices preparing TAF shall keep the forecasts under continuous review and, when necessary, shall issue amendments promptly. (Annes 3, Chap 6, Standard 6.2.4)	Honduras	TAF are not being issued.	NOV/ 2007		A		NMS		
JAM Jamaica										
MET 4 CAR	SIGMET information (Annex 3, Jamaica Part I, Chapter 7, standard 7.1.1)		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	U	Ensure the correct elaboration of SIGMETs and their dissemination in accordance with the requirements of Table MET 2A.	State	APR/ 2003	
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 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		
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.

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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 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.
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.	U	Ensure the correct elaboration of SIGMETs and their dissemination in accordance with the requirements of Table MET 2A.	State	APR/ 2003	
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 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		
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	States		
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.	State		This implementation is still under study

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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 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		

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		
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		

VCT Saint Vincent and the Grenadines

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		
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TTO Trinidad and Tobago

OUTSTANDING DEFICIENCIES

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD 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 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 Tobago 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	
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		

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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		

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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 30 SAM	Compliance with the requirements of the World Meteorological Organization (WMO) with regard to qualifications and training of aeronautical meteorology (MET) personnel (Annex 3, Chapter 2, Standard 2.1.5)	Bolivia / Aerodrome meteorological offices and meteorological watch office (MWO) of La Paz	Not all MET personnel complies with the requirements related to qualifications and training of WMO Publication No. 49. MET Technical personnel is complying functions of professional meteorologists.	OCT/ 2006	a) Carry out a review the functions and training of the aeronautical meteorologists; and b) plan and carry out training and/or refreshment courses for aeronautical meteorological personnel requiring them.	U	They have sent MET personnel to get trained in Argentina. These efforts will continue.	AASANA		
MET 41 SAM	Notify the RVR for CAT I 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, transmissometer	The RVR of SCIE SCCI have not been implemented.	DEC/ 2006		A	To plan the acquisition of the transmissometer or forward-scatter meter for SCCI aerodrome.	DGCA in coordination with the MET authority		
COL Colombia										
MET 32 SAM	Compliance with the requirements of the World Meteorological Organization (WMO) with regard to qualifications and training of aeronautical meteorology (MET) personnel (Annex 3, Chapter 2, Standard 2.1.5)	Colombia / Aerodrome meteorological offices and meteorological watch office (MWO) of Bogotá	Not all MET personnel complies with the requirements related to qualifications and training of WMO Publication No. 49, MET Class IV personnel is carrying out functions of MET Class II personnel.	JUN/ 1996	a) Review the functions and training of the aeronautical meteorologists; and b) Plan and carry out training and/or refreshment courses for aeronautical meteorological personnel requiring them.	U	In consultancy process, through TDA; through which alternatives for the solution to this problem are expected.	UAEAC		
MET 42 SAM	Notify the RVR for CAT I 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										

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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 33 SAM	Compliance with the requirements of the World Meteorological Organization (WMO) with regard to qualifications and training of aeronautical meteorology (MET) personnel (Annex 3, Part I, Chapter 2, standard 2.1.5)	Ecuador / Aerodrome meteorological offices and meteorological watch office (MWO) of Guayaquil	Not all MET personnel complies with the requirements related to qualifications and training of WMO Publication No. 49.	JUN/ 1996	a) Review the functions and training of the aeronautical meteorologists; and b) Plan and carry out training and/or refreshment courses for aeronautical meteorological personnel requiring them.	B	Training programmes at national and international level are being carried out to have the specialized aeronautical meteorology personnel required.	DGAC	2007	
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.	B		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.	B		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 Hydromet Nat. Service		
MET 28 SAM	SIGMET information (Annex 3, Chapter 7, Standard 7.1.1)	Guyana / Meteorological watch offices (MWOs) of Georgetown	Not all SIGMET messages are prepared based on the procedures established by ICAO.	NOV/ 2006	a) Implement the SIGMET 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.	U		Guyana Hydromet National Service		
MET 34 SAM	Compliance with the requirements of the World Meteorological Organization (WMO) with regard to qualifications and training of aeronautical meteorology (MET) personnel (Annex 3, Part I, Chapter 2, standard 2.1.5)	Guyana / Aerodrome meteorological office and meteorological watch office (MWO) of Georgetown	The MET Authority does not have available the minimum quantity of personnel to provide MET service.	NOV/ 2006	a) Review the functions and training of the aeronautical meteorologists; and b) Plan and carry out training and/or refreshment courses for aeronautical meteorological personnel requiring them.	A		GCAA in coordination with National MET Service		
MET 44 SAM	Report the RVR for CAT I 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		

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 56 SAM	Surface wind, Annex 3, Standard 4.1.2.1)	Guyana COM Unit	Displays of surface wind in ATS units corresponds to wind sensor installed under the control tower	NOV/ 2006	Surface wind displays from surface wind from meteorological stations shall be installed in 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 Hydromet 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		
PAN Panama										
MET 35 SAM	Compliance with the requirements of the World Meteorological Organization (WMO) with regard to qualifications and training of aeronautical meteorology (MET) personnel (Annex 3, Chapter 2, Standard 2.1.5)	Panama / Aerodrome meteorological offices and meteorological watch offices (MWO) of Tocumen	Not all MET personnel complies with the requirements related to qualifications and training of WMO Publication No. 49.	NOV/ 2000	a) Review the functions and training of the aeronautical meteorologists; and b) Plan and carry out training and/or refreshment courses for aeronautical meteorological personnel requiring them.	A	They are making efforts to use the resources of some projects to be implemented. Plans for the formation and update to start in 2007 and end in 2010.	NCAA in coordination with Hydromet Nat. Service		
MET 81 SAM	Aeronautical meteorological stations and observations (Annex 3, Part I, Chap. 4, standard 4.1.1)	Panama, Changinoia, Bocas del Toro and David aerodromes.	There are no MET stations in the aerodromes of MPBO, MPCH and MPDA.		Acquire and install the stations.	U		AAC		
MET 82 SAM	Observations and routine reports (annex 3, Part I, Chap. 4, Standard 4.3.2 a) and b)	Panama, aerodrome meteorological Offices.	The standard has not been implemented.	MAY/ 2007	Update personnel and implement the standard.	B		DCA		
MET 83 SAM	Observations and special reports (annex 3, Part I, Chap. 4, Standard 4.4.2 a) and b)	Panama, aerodrome meteorological Offices.	The standard has not been implemented.	MAY/ 2007	Update personnel and implement the standard.	B		DCA		

PRY Paraguay

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 36 SAM	Compliance with the requirements of the World Meteorological Organization (WMO) with regard to qualifications and training of aeronautical meteorology (MET) personnel (Annex 3, Chapter 2, Standard 2.1.5)	Paraguay / Aerodrome meteorological offices and meteorological watch office (MWO)	Not all MET personnel complies with the requirements related to qualifications and training of WMO Publication No. 49. The actual personnel does not satisfy the minimum requirements for the provision of MET service.	OCT/ 2006	Plan and carry out training and/or updating courses for aeronautical meteorological personnel, as necessary.	U	Short Term: Hire the personnel available graduated at the FP-UNA and 5 meteorological observers, graduated in Class IV Course carried out by INAC. Med. Term: Carry out an Aeronautical Meteorology Formation Course, in accordance with the requirements of WMO document No. 258. Long Term: Develop projects for the formation of Class I and Class II personnel with the assistance of Voluntary Technical Cooperation and senior level education institutes of the country.	DINAC	DEC/ 2007	There are legal restrictions, since currently it is not possible to increase the number of public officers hired.
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	
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, SPQU, SPHI, SPRU, SPSO and SPTN have not been implemented.	JUN/ 1996	Plan the acquisition or repairment of the RVRs.	A	Lima TDZ and Cusco: 2001, Iquitos 2002, Arequipa 2004, Chiclayo and Trujillo 2006, Pisco and Tacna 2007. The RVR MID of Lima, December 2004.	CORPAC	2009	
MET 63 SAM	Runway visual range (Annex 3, Chap. 4, Standard 4.6.3.4) FASID Table AOP 1 (CAR/SAM III-AOP 1-39)	Aerodrome meteorological station of Lima-Callao	No runway visual range assessments are made in the middle point.	NOV/ 2004		A	The RVR will be transferred from the runway end to the middle point.		2007	
SUR Suriname										

OUTSTANDING DEFICIENCIES

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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		
MET 38 SAM	Compliance with the requirements of the World Meteorological Organization (WMO) with regard to qualifications and training of aeronautical meteorology (MET) personnel (Annex 3, Part I, Chapter 2, standard 2.1.5)	Suriname / Aerodrome meteorological offices and meteorological watch office (MWO) of Paramaribo	Not all MET personnel complies with the requirements related to qualifications and training of WMO Publication No. 49.	JUN/ 1996	a) Review the functions and training of the aeronautical meteorologists; and b) Plan and carry out training and/or refreshment courses for aeronautical meteorological personnel requiring them.	B		NCAA in coordination with the MET Centre		
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 58 SAM	SIGMET information (Annex 3, Chap 7, Standard 7.1.1)	Suriname Aerodrome MET Offices and MET Watch Office (MWO) of Paramaribo	SIGMETs have not been prepared	OCT/ 2004	As a matter of urgency the Suriname MET services starts preparing and issuing SIGMETs	U		The NCAA in coordination with the MET Centre		
MET 59 SAM	Surface wind (Annex 3, Standard 4.1.2.1)	Suriname COM Dependency	Displays of surface wind in ATS units correspond to wind sensor installed at the top of the TWR	OCT/ 2004	Surface wind display in the surface of ATS dependencies must corresponds to the sensors of the MET station	U		NCAA in coordination with the Hydromet Centre		
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	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	Coordination between COM/MET. Implementation of SIGMET guide training.	COM/MET - WMO		

OUTSTANDING DEFICIENCIES

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

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1	2	3	4	5	6	7	8	9	10	11
MET 39 SAM	Compliance with the requirements of the World Meteorological Organization (WMO) with regard to qualifications and training of aeronautical meteorology (MET) personnel (Annex 3, Chapter 2, Standard 2.1.5)	Uruguay / Meteorological Watch Offices (MWO) and aerodrome meteorological offices.	Not all MET personnel complies with the requirements related to qualifications and training of WMO Publication No. 49. The actual personnel does not satisfy the minimum requirements for the provision of MET service.	JUN/ 1996	a) Review the functions and training of the aeronautical meteorologists; and b) Plan and carry out training and/or refreshment courses for aeronautical meteorological personnel requiring them.	U		DINACIA / DNM		In accordance with the statistics of number of days with visibility less than 2000 m. (2 days per year) it has been determined not to install the RVR of SLCB.
MET 80 SAM	Aerodrome meteorological stations and observations. (Annex 3, Chap 4, Standard 4.1)	Uruguay, SOCL, SURV y SUSO.	There is not aerodrome meteorological station.	OCT/ 2006	Acquire and install the stations.	A		DINACIA/ DNM		
VEN Venezuela										
MET 65 SAM	WMO requirements regarding MET personnel qualifications and training (Annex 3, Part I, Chapter 2, standard 2.1.15)	Venezuela, Caracas WMO	Caracas MWO does not have the minimum personnel required for the provision of MET service	FEB/ 2004		A	Implement recommended actions MET/05 and MET/06 of December 2004 mission.	INAC in coordination with SMN		
MET 66 SAM	Routine observations and reports (Annex 3, Chap 4, Standards 4.3.1 and 4.3.2)	Venezuela, Paraguana	Does not have MET stations	DEC/ 2004	Installation in process	A	Give priority to the installation of these stations with the VNEMETH Programme.	INAC in coordination with the SMN	AUG/ 2007	
MET 67 SAM	FASID Table AOP 1 (CAR/SAM III-AOP 1-39)	Venezuela, 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)	Venezuela, 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 69 SAM	Flight documentation (Annex 3, Part I, Recommendation 9.4.1)	Venezuela, MET Office Caracas	Is not in accordance with Annex 3.	DEC/ 2005	Reported by IATA	A	Implement the Recommendations of the mission carried out on Dec. 2004.	INAC in coordination with SMN	2007	
MET 70 SAM	MET stations and obs. (Annex 3, Chap 4, Standard 4.1.1)	Venezuela, MET Office Maracaibo	IATA informs that all MET information is inappropriate.	APR/ 2005	Reported by IATA.	A	Implement the Recommendations of the mission carried out in Dec. 2004.	INAC in coordination with SMN	DEC/ 2008	
MET 86 SAM	Observations and routine reports (annex 3, Part I, Chap. 4, Standard 4.4.2 a)	Venezuela, aerodrome meteorological Offices.	The standard has not been implemented.	MAY/ 2007	Update personnel and implement the standard.	B		INAC	AUG/ 2007	