



Agenda Item 4

Air Navigation Matters

4.2 Follow-up on the implementation of the NAM/CAR Regional Performance Based Air Navigation Plan (RPBANIP) in Eastern Caribbean:

- **Progress reports of the AIM, AGA, ATM, CNS, MET and SAR Committees**

PROGRESS REPORT ON MET ISSUES AND COORDINATION

(Presented by the E/CAR/CATG Chairperson)

SUMMARY	
<p>This working Paper presents a proposed way of working with the Caribbean Meteorological Organisation (CMO) to address Aeronautical Meteorology matters in the absence of a MET Committee. Also a review of the MET issues is presented based on the assistance of the ICAO MET regional Officer.</p>	
References:	
<ul style="list-style-type: none"> • 33rd Eastern Caribbean Working Group (E/CAR/WG/33) Meeting, Barbados, June 2012 	
Strategic Objectives	<p><i>This working paper is related to Strategic Objectives:</i></p> <p><i>A. Safety – Enhance global civil aviation safety</i></p> <p><i>C. Environmental Protection and Sustainable Development of Air Transport</i></p>

1. Introduction

1.1 At present, there is no Meteorological (MET) Committee of the E/CAR/CATG. This lack of participation was reflected in the E/CAR/WG/33 Meeting. As a result there was little to no discussion on MET matters at previous E/CAR/WG meetings. Also during the E/CAR/WG/33 Meeting, regarding the analysis of established timelines, planned activities and corresponding action plans for Regional Performance Objectives (RPO), the Meeting concluded that several activities for the RPO require time validation and responsible parties, since in several cases these dates have expired or the activities are no longer valid; and that there is a lack of action plans for RPO 6 and RPO 12, associated with SAR and MET respectively.

2. Discussion

MET coordination agreement CMO and E/CAR/CATG

2.1 In order to seek a way to progress on the Meteorological issues and activities requested in Air Navigation in the Eastern Caribbean, Mr Tyrone Sutherland, Co-ordinating Director of the Caribbean Meteorological Organisation (CMO) has been contacted by the E/CAR/CATG Chairman and has agreed to a regime of functional co-operation between the E/CAR/CATG and the CMO.

2.2 This co-operation will among other things:

- a. Establish a relationship between the E/CAR/CATG and CMO in order to coordinate on regional Aeronautical Meteorology matters. Initially Mr Sutherland will be the CMO Point of Contact (PoC) and E/CAR/CATG Chairman will be the E/CAR PoC.
- b. Determine an agreed way of working together, exchanging information etc. This exchange and follow-up will be done mainly electronically via email, teleconference, telephone calls or by formal paper exchange.
- c. Encourage participation in meetings of the two organisations by regional Air Navigation and MET personnel.

2.3 The next meeting of the CMO is scheduled for Barbados in November 2013.

Review of the MET issues contained in RPBANIP RPO 12

2.4 With the assistance of the ICAO NACC Regional Officer in Aeronautical Meteorological, Mr. Guillermo Vega, a review of the MET activities contained in the RPO No. 12 of the NAM/CAR Regional Performance based Air Navigation Implementation Plan (RBPANIP) was carried out as attached in the **Appendix** to this paper.

3. Suggested action

3.1 The meeting is invited to:

- a) take note of the information contained in this paper;
- b) Review the updates provided on MET issues as described in the Appendix;
- c) Prepared as needed, the actions or information for CMO to report on its progress; and
- d) Update the terms of reference of the E/CAR CATG to reflect the MET issues related activities

APPENDIX

12. IMPROVE AVAILABILITY OF METEOROLOGICAL INFORMATION				
Benefits				
Efficiency	<ul style="list-style-type: none"> improve aerodrome and airspace capacity improve situational awareness of pilots reduce unnecessary consumption of fuel and prevent unnecessary delays due to minimal meteorological conditions at the airports 			
Safety	<ul style="list-style-type: none"> improve flight planning schedule Increase the number of flights in areas of fair weather conditions and prevent or reduce flights in areas of adverse meteorological conditions and volcanic ash clouds prevent landing operations at aerodromes under minimal meteorological conditions 			
Strategy				
ATM Component	TASK DESCRIPTION	START – END	RESPON-SIBLE	STATUS
AOM, DCB, AO, TS, AUO	a) Increase facilities to disseminate and exchange aeronautical meteorological information i) Increase NOAAnet workstations, AFTN terminals and internet facilities to disseminate OPMET data at meteorological offices and stations. ii) Increase AFTN, internet and other communications facilities to relay aircraft special reports from the air traffic control units to the meteorological offices. iii) Expand the number of WIFS workstations used to receive OPMET data and meteorological products of the World Area Forecast System.	2009- 2012 2013	States / Territories	<i>i) & ii) Valid</i> <i>iii) Completed</i>
	b) Increase availability, timeliness and quality of OPMET data i) Improve the use of the METAR and TAF codes/templates used to disseminate meteorological reports and aerodrome forecasts ii) Enhance preparation and availability of SIGMET information on hazardous meteorological conditions and volcanic ash clouds iii) Enhance the availability of landing forecasts, TREND, considering user requirements	2009- 2012 2013	States / Territories	Valid
	c) Ensure continuous operation of meteorological and communications equipment at the meteorological offices and stations, through: - Implement lightning, voltage spike and line protections to prevent damage to automatic meteorological stations	2009- 2015	States / Territories	Valid
	d) Establish contingency procedures to disseminate OPMET data, via Internet, in case of failure of the AFTN or NOAAnet facilities.	2009- 2012	States / Territories ICAO	Valid Completed

AO	e) Improve the quality of data, provided by meteorological sensors, used in meteorological reports • Establish verification and calibration programmes of data provided by meteorological instruments and automated weather systems at the aerodromes	2009-2015	States / Territories	Valid
AUO	f) Implement oversight programmes to ensure availability and quality of OPMET data issued by CAR States and Territories and Territories and provide assistance if required	2009-2015	States / Territories	Valid
AUO	g) Improve participation of States and Territories in the International Airways Volcano Watch and provide assistance if necessary	2009-2015	ICAO Washington VAAC	Valid
AUO	h) Improve participation of States and Territories in the International Tropical Cyclone Watch and provide assistance if necessary	2009-2015	ICAO Miami TCAC	Valid
AOM, DCB,AO, TS, AUO	i) Implement Quality Assurance System programmes for the aeronautical meteorological service	2010- 2012 2013	States / Territories	Valid
AUO	j) Develop yearly staffing analysis and training programme on aeronautical meteorological matters for operational personnel	2009-2015	States / Territories ICAO, WMO AR IV	Valid
AUO	Prepare monthly satellite and radar weather images to detect areas of low frequency of cumulonimbus and thunderstorms to be used for air traffic flow planning	2010-2016	States / Territories ICAO	Valid
AO, TS	k) Increase the number of automated weather systems at the aerodromes	2011-2015	States, Territories	Valid
	l) Implement meteorological data downlinks at the MET and ATS units	2012-2015	States / Territories	Valid
	m) Implement meteorological data up links from automated meteorological stations and MET and ATS units for aircrafts	2012-2015	States / Territories	Valid
SDM	n) Monitor implementation progress	2009-2016	ICAO	Valid
GPIs	GPI/6: air traffic flow management; GPI/7: flexible/dynamic ATS route management; GPI/9: situational awareness; GPI/14: runway operations; GPI/17: implementation of datalink applications; GPI/18: aeronautical information; GPI 19: Meteorological systems.			