



International Civil Aviation Organization

**FIFTH MEETING OF THE ASIA/PACIFIC METEOROLOGICAL
HAZARDS TASK FORCE (MET/H TF/5)**

Seoul, Republic of Korea, 18 – 20 March 2015

Agenda Item 2: SIGMET and advisory information

IMPROVEMENT OF SIGMET AVAILABILITY IN THE APAC REGION

(Presented by the Rapporteur, MET/H TF, Ad Hoc Group, SIGMET Deficiencies)

SUMMARY

This paper presents a progress report on a regional initiative to investigate and implement measures to improve the availability of SIGMET information in the Region.

1. INTRODUCTION

1.1 Reported deficiencies in SIGMET information in the Asia Pacific (APAC) Region are recorded in the APANPIRG database of air navigation deficiencies, which indicates that, inter alia: (a) the requirements for issuance and proper dissemination of SIGMET, including SIGMET for volcanic ash, have not been fully implemented in Papua New Guinea (PNG) (ref: AP-MET-08; recorded in 2003); and (b) there is a lack of SIGMET issued for the Port Moresby, Honiara, and Nauru FIRs (ref: AP-MET-22, AP-MET-23 and AP-MET-24; recorded in 2011).

1.2 From the global perspective, and also in view of long-standing SIGMET implementation deficiencies in some States, the ICAO Meteorology Divisional Meeting (MET/14), held in Montreal, Canada, 7 to 18 July 2014, recommended that a regional hazardous weather advisory framework should be implemented expeditiously and requested that an appropriate ICAO expert group, in close coordination with the World Meteorological Organization (WMO), be tasked to develop a regional advisory system for specific en-route hazardous meteorological conditions especially in those States where notable SIGMET-related deficiencies persist (MET/14 Recommendation 2/9).

1.3 In view of the MET/14 recommendation above, and given the urgent need to address the safety issues related to non-issuance of SIGMET by some States within the APAC region, MET SG/18 (Beijing, China, 18 to 21 August 2014) concluded that preparatory action to investigate options and implement viable solutions to reduce SIGMET deficiencies in the APAC Region should be progressed as a matter of urgency. In particular, it was noted that there was a need to improve the availability of SIGMET information for the Port Moresby, Honiara and Nauru FIRs.

1.4 METSG/18 requested the Meteorological Hazards Task Force (MET/H TF) to conduct an investigation into options for addressing the above matter. MET/H TF added the task to its work plan and established an ad-hoc group comprising Australia, China, Japan, Indonesia and New Zealand (Rapporteur), to focus specifically on the task.

2. DISCUSSION

2.1 In October 2014, the Ad Hoc Group (the “Group”) developed and implemented a work plan, a copy of which is provided in the Attachment. A key task under the plan involved the Group, with the assistance of the APAC ICAO Regional Office, undertaking consultation with PNG, Solomon Islands and Nauru in an effort to establish the situation in each State regarding the issuance of SIGMET information, and to determine whether any bilateral arrangements were in place for the issuance of SIGMET information.

2.1 The consultation to date (as of 19 February 2015) has identified that;

2.1.1 PNG is issuing SIGMETs for the Port Moresby and Honiara FIRs, but not for the Nauru FIR.

2.1.2 The SIGMETs issued by PNG contain formatting errors and are not generally compliant with Annex 3 or the Asia Pacific Regional SIGMET Guide.

2.1.3 Dissemination of SIGMETs issued by PNG is not consistent with that recommended in the Regional SIGMET Guide.

2.1.4 A check of SIGMETs received by selected States over a two-month period (December 2014 and January 2015) noted inconsistencies in the number of SIGMETs received. For example, over the two-month period, 73 SIGMETs were received in Australia, 11 were received in New Zealand and none were received at the SADIS gateway.

2.1.5 There does not appear to be any formal bilateral arrangement between PNG and the Solomon Islands and Nauru for the issuance of SIGMETs by PNG for the Honiara and Nauru FIRs. However, while PNG, the Solomon Islands and Nauru believe such an arrangement exists, no documents could be found to confirm this. It is possible that an informal arrangement may have been made many years ago, but no evidence of this could be found.

2.1.6 The Solomon Islands is willing to take responsibility for issuing SIGMETs for the Honiara FIR, and has requested advice concerning the process they should follow to implement this.

2.1.7 Nauru has not designated a Meteorological Authority or established a local meteorological office and therefore is not able to issue SIGMETs for the Nauru FIR.

2.2 Consultation follow up action (as of 19 February 2015) includes the following;

2.2.1 PNG – has been provided with some initial advice and guidance on formatting SIGMETs to comply with Annex 3. They have also been invited to review the list of AFTN addresses used to disseminate SIGMETs.

2.2.2 Solomon Islands – the ICAO Regional Office is assisting the Solomon Is with advice on taking responsibility for the issuance of SIGMETs for the Honiara FIR, including the procedures for advising ICAO and PNG of their plans.

2.2.3 Nauru – the ICAO Regional Office, at the request of the Group, has sent a formal letter to Nauru advising of the requirement to designate a Meteorological Authority. It is anticipated that Nauru will subsequently designate a Meteorological Authority, but it is unlikely they will be able to establish a meteorological watch office. In view of this, Nauru will need to formally request another State to provide SIGMETs for the Nauru FIR on its behalf. The ICAO Regional Office has indicated to the Group that it is prepared to provide Nauru with advice about how to make such a request.

2.3 Information received during the consultation noted that PNG had participated in the SIGMET tests conducted on 5, 12 and 19 November. This had involved PNG issuing test SIGMETs for the Port Moresby, Honiara and Nauru FIRs. The Solomon Is also advised that they had issued test SIGMETs for the Honiara FIR. It was pleasing to receive this information, as this is the first time that PNG and the Solomon Is have participated in the annual SIGMET tests.

2.4 The work of the Ad Hoc Group to date has resulted in good progress towards addressing the long outstanding deficiencies concerning SIGMET issuance for the Port Moresby, Honiara and Nauru FIRs. The Group plans to continue its work during 2015 to assist with the removal of the SIGMET deficiencies concerning the Port Moresby, Honiara and Nauru FIRs from the APANPIRG database of air navigation deficiencies.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information provided in this paper.

ATTACHMENT

ICAO APAC METEOROLOGICAL HAZARDS TASK FORCE (MET/H TF), Ad Hoc Group, SIGMET Deficiencies

Work Plan
(V1.1 – 21 September 2014)

1. AD HOC GROUP		
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2. DESCRIPTION	
Objective	To reduce SIGMET deficiencies in the APAC Region.
Benefits	Improve pre-flight planning and in-flight safety by optimizing flight routes with respect to hazardous weather phenomena.
Terms of Reference	Assist the MET/H TF in identifying viable options and implementation strategies to reduce SIGMET deficiencies in the APAC Region.
Work Programme	<ul style="list-style-type: none"> • Review SIGMET deficiencies in the APAC region; • Identify options to eliminate/reduce deficiencies; • Agree on options and implement as appropriate; and • Monitor SIGMET issuance and remove deficiencies where appropriate.

3. COMMUNICATION STRATEGIES				
Description	Target Audience	Delivery Method	Frequency	Responsibility
Work Plan	Ad Hoc Group members	Email	As required	Rapporteur
General correspondence	Ad Hoc Group members	Email	As required	Ad Hoc Group members
Status & milestone reports	ICAO Secretariat and Ad Hoc	Email	Monthly	Rapporteur

	Group members			
Ad Hoc Group Report	MET/H TF and METSG	Working/Information Paper	MET/H TF – March 2015 METSG – July 2015	Rapporteur (report to MET/H TF) Secretariat (report to MET SG)

4. WORK PLAN			
Task/Milestone	Accountability	Review Dates	Status
Task 1: Assist the ICAO Secretariat to identify the States/FIRs where SIGMET deficiencies still exist.	Rapporteur	26 September 2014	Three States/FIRs identified. Papua New Guinea (Port Moresby FIR), Solomon Is (Honiara FIR) and Nauru (Nauru FIR)
Task 2: Assist the ICAO Secretariat to provide a State letter/email to the States identified in Task 1, to advise them of the regional initiative and establishment of the Ad Hoc Group.	Rapporteur	6 October 2014	Email prepared by the ICAO Regional Office sent to Papua New Guinea, Solomon Is and Nauru advising of the regional initiative and also requesting a point of contact in each State.
Task 3: Investigate options to eliminate/reduce SIGMET deficiencies.	Ad Hoc Group	28 November 2014	Summary of initial consultation with PNG, Solomon Is and Nauru; PNG – capable of SIGMET issuance for the Port Moresby, Honiara and Nauru FIRs. Solomon Is – willing to accept responsibility for SIGMET issuance for the Honiara FIR. Nauru – advised they had not designated a Met Authority or established a meteorological office and therefore were not able to issue SIGMETs for the Nauru FIR.

			<p>No evidence found of formal bilateral arrangements between any of the States (PNG, Solomon Is or Nauru).</p>
<p>Task 4: Assist the ICAO Secretariat in the facilitation of discussion of viable options with relevant States. This will include cost recovery options.</p>	<p>Ad Hoc group</p>	<p>19 February 2015</p>	<p>Examples of SIGMETs issued by PNG received from PNG and a number of formatting errors noted.</p> <p>Copies of SIGMETs issued by PNG and received in Australia and New Zealand during December 2014 and January 2015 obtained. It was noted that 73 SIGMETs had been received in Australia and only 11 in New Zealand.</p> <p>Some inconsistencies were noted between the list of AFTN addresses used by PNG to disseminate SIGMETs and the recommended listing in the Asia Pacific Regional SIGMET Guide.</p> <p>Solomon Is – requested assistance with formalizing the process and procedures for the issuance of SIGMETs for the Honiara FIR. The Regional Office will assist with this.</p> <p>Nauru – the Regional Office provided Nauru with a formal letter setting out the process for designating a Met Authority.</p>

			Discussion on cost recovery options still to be considered.
Task 5: Agree on the most viable option, in consultation with the ICAO Secretariat, and proceed to implement as appropriate.	Ad Hoc Group	December – July 2014/15	Under action
Task 6: Monitor the implementation of the agreed option to remove/reduce deficiencies.	Ad Hoc Group	On going	
Task 7: Monitor global development of the establishment of a regional advisory system for hazardous weather	Ad Hoc Group	On going	
Task 8: Report progress to MET/H TF	Rapporteur	19 February 2015	IP submitted for MET/H TF/5
<i>Milestone: Reduction in SIGMET deficiencies</i>	<i>States</i>	September 2015	