

International Civil Aviation Organization



ICAO

WORKING PAPER

ICAO Asia and Pacific (APAC)
Twenty-Sixth Meeting of the Meteorology Sub-Group
(MET SG/26)

Online, 1 to 5 August 2022

Agenda Item 3: Air navigation deficiency

RESOLUTION OF MET DEFICIENCY AP-MET-04

(Presented by Papua New Guinea)

SUMMARY

This paper presents the resolution summary of MET air navigation deficiency number AP-MET-04 for Papua New Guinea for Meteorology Sub-Group (MET SG) to review and provide advice for necessary action as required to resolve the deficiency.

1. INTRODUCTION

1.1 As defined by APANPIRG, an air navigation deficiency is a situation where a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices (SARPs), and which situation has a negative impact on the safety, regularity or efficiency of international civil aviation¹.

1.2 A deficiency was identified by APANPIRG as information on volcanic activities were not provided regularly to ATS units, MWOs and VAACs by the agency responsible for reporting volcanic activities and volcanic related information. This was reported at the WMO/ICAO Workshop on Volcanic Ash Hazards in Darwin in 1995 and was registered by APANPIRG as **AP-MET-04**.

1.3 This deficiency was raised against PNG in relation to the standards in ICAO's Annex 3, Chapter 3, section 3.6 and Appendix 2, section 4.1 regarding the reporting of information on volcanic eruptions to civil aviation units.

1.4 This paper presents the corrective action taken by the state (Papua New Guinea) to address the deficiency and invite MET SG to examine the corrective actions provided and advice on further course of action required by the state.

¹ APANPIRG Procedural Handbook, 6th...1 June 2020, Part v, Section 2, paragraph 1.3

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2. DISCUSSION

2.1 Papua New Guinea is required to establish an arrangement for state volcano observatory to send the required volcanic eruption information as quickly as practicable to the associated ACC/FIC, MWO and VACC.

2.2 The agency responsible for the issuing of volcanic eruption information in Papua New Guinea, as included in Table MET I-1, Volume I of the APAC Air Navigation Plan, is the Rabaul Volcanological Observatory (RVO). RVO is the national institution responsible for monitoring volcanoes in Papua New Guinea. It is an entity under the Department of Mineral Policy and Geohazards Management.

2.3 The corrective action taken to ensure volcanic information are supplied quickly as practicable by the Rabaul Volcanological Observatory to the mentioned aviation entities are listed below:

- a) Liaising with RVO to find out how volcanic eruption information can be supplied as soon as possible and regularly to aviation users, and
- b) Establish a coordination process or arrangement to make sure volcanic eruption information are provided regularly to ATS, MWO and VAAC offices, and
- c) Sample of recent VOL ASH SIGMET issued by PNGNWS.

2.4 There is an effective email system (internal email distribution) that was established by RVO to effectively and efficiently disseminate volcanic information to ATS and MWO in PNG and VAAC Darwin, along with local operators (see Attachments 2 and 3). This email system was assessed to be very effective during the consultative meeting between CASA and RVO in 2017 (see Attachment 1).

2.5 Establishment of a formal Agreement between RVO and the aviation entities (ATS, WMO and VAAC) is becoming a challenging task because ‘user pay policy’ continues to be an issue where RVO wants to charge the aviation industry for its services.

2.6 We will revisit the formal agreement agenda if and when the situation warrants (government departments/ policies etc..) going forward.

2.7 Evidence of MET deficiency resolution has been provided in the following attachments:

- Attachment 1: Meeting minutes with RVO team at Rabaul by CASA.
- Attachment 2: Email message sample-ATS, MWO and VAAC from RVO contact.
- Attachment 3: Recent Volcanic Ash SIGMET by PNGNWS.
- Attachment 4: Darwin VAAC products that have incorporated volcanic eruption information from RVO and real time WhatsApp communication.

2.8 Letter of Support to confirm regular and timely receipt of volcanic eruption information from NWS, ATS and VAAC was sought as evidence from the respective organisations. The support note or letter from PNGNWS (MET) and Niusky Pacific (ATS) will be furnished as separate attachment when available.

3. ACTION BY THE MEETING

3.1 On the basis of establishing the resolution status of this deficiency (AP-MET-04), CASAPNG sincerely requests the assistance of MET SG to review the evidence covered in section two (2) of this paper and provide feedback.

3.2 The MET SG is requested to consider making a recommendation to APANPIRG to remove AP-MET-04 from the deficiency list.

3.3 The MET/S-WG is hereby invited to:

- a) Review the evidence of deficiency resolution presented, and
- b) Provide feedback on the resolution status.

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ATTACHMENT 1 - RVO-CASAPNG Meeting Minutes

 CASA PNG	 RVO PNG	MEETING MINUTES		Document No.	Revised Date
		Official Record		1 of 2017	
				Effective Date	Pages
		30/07/2017	3		

1.Meeting Details

Meeting Name	CASA-RVO Consultative Meeting
Meeting Number	1/2017
Date of Meeting	19 th July, 2017
Time of Meeting	13:00pm -14:30pm LT
Location of Meeting	RVO Conference Room, Tunnel Hill, Rabaul
Meeting Objective	The purpose of the meeting was to discuss and engage RVO with the aviation units in the regular supply of volcanic eruption information for safety to air navigation in PNG.
Chairperson/Scribe	MET Inspector - CASAPNG
Attendees	<ol style="list-style-type: none"> 1. Mr. Ima Itikarai (Assistant Director - RVO) 2. Mr. Kila Mulina (Volcanologist – RVO) 3. Mr. Isekel Tutmulai (Snr Technical Officer – RVO) 4. Mr. Eric Tenor (Snr Surveyor – RVO) 5. Mr. Brian Sirip (OIC Weather Office Tokua – NWS) 6. Mr. Jonathan Kuduon (Seismologist – RVO) 7. Mr. John Bosco D (Technician – RVO) 8. Mr. Konny Nato (MET Inspector and Chair – CASA)

2. WELCOME AND INTRODUCTION

The meeting was chaired by AvMET Inspector of CASA. He formally welcomed NWS members and thanked them for making time available to attend the meeting. The meeting was committed with a word of prayer by Mr. B. Sirip of Tokua Weather Office.

The attendees were introduced in their respective professional capacities.

3. DISCUSSION AGENDA

The following items were discussed:

- Welcome
- Attendance
- Introduction of members
- Overview of CASA and Aviation Safety
- Overview of RVO and its activities
- Cost Recovery Issue
- Way Forward

- AOB
- Meeting adjourned

4. **OVERVIEW OF CASA AND AVIATION SAFETY**

DISCUSSION		
<p>The chair (KN) outlined CASA’s function as the regulator to regulate the security and safety of the operators and service providers participating in the civil aviation system.</p> <p>The chair further explained that the aviation entities emanated from the old DCA and demarcated their responsibilities. These entities are;</p> <ul style="list-style-type: none"> • National Airports Corporation (NAC) – Responsible for Aerodrome/Airports operations • PNG Air Services Limited (PNGASL) - Responsible for Air Navigation Services • Accident & Investigation Commission (AIC) – Responsible for investigation of aircraft accident • PNG National Weather Service (PNGNWS) – Responsible for weather information relayed through PNGASL <p>The meeting also heard the chair explain briefly about CASA’s safety oversight function over the operators and the service providers to ensure safety is maintained in accordance with the requirements of the PNG Civil Aviation Rules and ICAO’s Annexes.</p>		
ACTION ITEM	PERSON RESPONSIBLE	DEADLINE
NIL		

5. **OVERVIEW OF RVO AND ITS ACTIVITIES**

DISCUSSION		
<p>The Assistant Director of RVO (II) expounded on the activities of RVO and its contribution to aviation safety, particularly the pre-eruption, eruption and post eruption information and provision of advice on volcanic activity.</p> <p style="background-color: yellow;">Further explanation was given that the information on volcanic activity is relayed to the stakeholders including VAAC in Darwin using the contact in their email address distribution list.</p> <p>There are no formal documented process and procedures including agreement in place for most of their operations.</p> <p>The Assistant Director stressed the challenges RVO faces in maintaining its monitoring equipment and operations. Most support from the organisation (RVO) is derived from the donor funded projects, Austaid being the major contributor.</p>		
ACTION ITEM	PERSON RESPONSIBLE	DEADLINE
NIL		

6. **COST RECOVERY ISSUE**

DISCUSSION
<p>The chair (KN) outlined the fact that the cost recovery issue is still a grey area in PNG civil aviation. There are many instances where some aviation service providers who contribute to the overall safety of flight operations and the need to adequately recover an appropriate cost in order to maintain their operations.</p>

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The chair explained that only aerodrome and air navigation services charges are applied and paid for by the operators as outlined in PNGAIP.

It was explained by the RVO Assistant Director (II) that, RVO had two meetings with NAC in relation to the cost recovery issue, latest being in 2011. No proper feedback was received from NAC and RVO is still waiting and are optimistic for a positive outcome.

The Cost Recovery for the service providers supplying aviation services to aviation users must be properly addressed by the government in order to assist the service providers concern to maintain its operations. CASA will try to assist in whatever way it can to ensure to aviation safety is maintained.

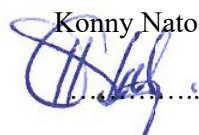
ACTION ITEM	PERSON RESPONSIBLE	DEADLINE
Cost Recovery Issue	<ul style="list-style-type: none"> • RVO • CASA 	Indefinite

7. WAY FORWARD

DISCUSSION				
<p>It was noted that the current arrangement where certain aviation service providers (air navigation) were not adequately compensated for their services rendered to aviation users were seen to be detrimental to aviation safety. These were expounded on to identify ways in which their responsibilities and services could be further improved.</p> <p>The way forward discussed and agreed by the meeting are as follows:</p> <ul style="list-style-type: none"> • RVO to have a documented process or procedures and agreement to disseminate volcanic eruption information to aviation unis and other stake holders, and • CASA to continue working with RVO and other stakeholders to affect cost recovery for their services to aviation industry. 				
ACTION ITEM				
<table border="1"> <thead> <tr> <th>PERSON RESPONSIBLE</th> <th>DEADLINE</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • RVO • CASA </td> <td>Indefinite</td> </tr> </tbody> </table>	PERSON RESPONSIBLE	DEADLINE	<ul style="list-style-type: none"> • RVO • CASA 	Indefinite
PERSON RESPONSIBLE	DEADLINE			
<ul style="list-style-type: none"> • RVO • CASA 	Indefinite			

8. ADJOURNMENT

The meeting was adjourned at 14:30pm.

Konny Nato

 Chairperson

Date: 30/07/2017

From: Ima Itikarai

Sent: Monday, April 25, 2022 4:45 PM

To: Harry Kore

Cc: 'aeoaeo@gmail.com'; 'ablock@usgs.gov'; 'chris_mckee@mineral.gov.pg'; 'darwin.vaac.admin@bom.gov.au'; Eric Tenor; Elizabeth Michael; Felix Taranu; 'Hadi.Ghasemi@ga.gov.au'; 'hausguria@gmail.com'; Isikel Tutmulai; John Bosco; 'jbivi.maggov2017@gmail.com'; 'jgomoga@gmail.com'; Kila Mulina; 'gracetiden@gmail.com'; 'kit.trobs@gmail.com'; 'knato@casapng.gov.pg'; Mikhail Sindang; Mikhail Herry; Mathew Moihoi; Ima Itikarai; 'rmongallee21@gmail.com'; 'Port-Moresby.Security@dfat.gov.au'; Ravenhill Bigilale; 'rneranaguri@gmail.com'; Steve Saunders; Winterford Eko; 'wallyjohnson@grapevine.com.au'; 'darwin.vaac@bom.gov.au'; 'rveoli@airniugini.com.pg'; 'consular.portmoresby@dfat.gov.au'; 'johnsontuke@gmail.com'; 'pomaleu@gmail.com'; 'BGS-Volcanology@bgs.ac.uk'; 'JulieSip@adra.org.pg'; 'vuvu.elizabeth6'; 'jnanong@niuskyacific.com.pg'; 'briefing@niuskyacific.com.pg'; 'csupervisor@niuskyacific.com.pg'; 'wmandie@niuskyacific.com.pg'

Subject: Manam volcano update

Dear Secretary,

Attached is update for Manam volcano.



Thank you.

Ima.

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ATTACHMENT 3 – Example of Vol Ash SIGMET by PNGNWS

 			
PAPUA NEW GUINEA NATIONAL WEATHER SERVICE			
P O Box 1240, Boroko, National Capital District, Papua New Guinea Phone: (+675) 325 9520 Facsimile: (+675) 325 5544 Email: weatheraviation@gmail.com			
WVNG20AYPY150243 AYPY SIGMET 02 VALID 150330Z/150930Z AYPY- AYPY PORT MORESBY FIR VA EMISSION MT MANAM PSN S0405 E14502 ERUPTION DETAILS: CONTINUOS VA OBS TO FL120 MOV SW =			
DATE AND TIME (UTC):	150300Z	AUTHORISED BY:	U.VIROBO/MM

ATTACHMENT 4 – Darwin VAAC products that have incorporated volcanic eruption information from RVO

FVAU01 ADRM 020815
VA ADVISORY
DTG: 20220602/0815Z
VAAC: DARWIN
VOLCANO: MANAM 251020
PSN: S0405 E14502
AREA: PAPUA NEW GUINEA
SUMMIT ELEV: 1807M
ADVISORY NR: 2022/108
INFO SOURCE: HIMAWARI-8, RVO
AVIATION COLOUR CODE: RED
ERUPTION DETAILS: VA TO FL080 OBS 02/0750Z EXT WNW OBS VA DTG: 02/0750Z OBS VA CLD:
SFC/FL080 S0407 E14503 - S0358 E14441 - S0348
E14447 - S0404 E14504 MOV NW 10KT FCST VA CLD +6 HR: 02/1350Z SFC/FL080 S0404 E14504 -
S0407
E14503 - S0402 E14436 - S0347 E14442 FCST VA CLD +12 HR: 02/1950Z SFC/FL080 S0406
E14503 - S0404
E14436 - S0348 E14441 - S0404 E14504 FCST VA CLD +18 HR: 03/0150Z SFC/FL080 S0404
E14504 - S0407
E14503 - S0405 E14436 - S0350 E14439
RMK: VA OBSERVED ON VISIBLE SATELLITE IMAGERY. VA HEIGHT AND
FORECAST MOV DERIVED FROM HIMAWARI-8 AND MODEL GUIDANCE.
COLOUR CODE UPGRADED TO RED BASED ON RVO ADVICE OF
SIGNIFICANT ACTIVITY WITHIN NEXT 24HRS.
NXT ADVISORY: NO LATER THAN 20220602/1400Z=

FVAU01 ADRM 050700
VA ADVISORY
DTG: 20220605/0700Z
VAAC: DARWIN
VOLCANO: MANAM 251020
PSN: S0405 E14502
AREA: PAPUA NEW GUINEA
SUMMIT ELEV: 1807M
ADVISORY NR: 2022/122
INFO SOURCE: HIMAWARI-8, RVO, WEBCAM
AVIATION COLOUR CODE: ORANGE
ERUPTION DETAILS: VA TO FL080 NO LONGER DISCERNIBLE OBS VA DTG: 05/0630Z OBS VA CLD: VA
NOT IDENTIFIABLE FM SATELLITE DATA WIND
SFC/FL080 090/10KT
FCST VA CLD +6 HR: 05/1230Z NO VA EXP
FCST VA CLD +12 HR: 05/1830Z NO VA EXP
FCST VA CLD +18 HR: 06/0030Z NO VA EXP
RMK: STEAM/SMOKE EMISSION OBSERVED TO BE MOV NNW AT 5000FT,
WITH NO DISCERNIBLE VA. GRD RPT INDICATES LOW SEISMIC

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ACTIVITY AND NO VA EMISSION. NO OTHER INFORMATION SOURCES
INDICATE THE PRESENCE OF ASH IN THE ATMOSPHERE. ADVISORY
TERMINATED.

NXT ADVISORY: NO FURTHER ADVISORIES=