

# Agenda 11.1

## Progress on Pacific Islands Aviation Weather Services

[Mr 'Ofa Fa'anunu, Chair of the  
Pacific Islands Aviation Weather  
Services (PIAWS) Panel]

# Objective

**To provide information, and seek strategic guidance and decision from the meeting on the followings:**

- Progress on implementing PMC-4 decisions
- Coordination with ICAO APAC Regional Office
- ICAO Meteorological Information Exchange Model (IWXXM)
- Air navigation deficiencies in the MET fields
- Cost recovery regional strategy
- Volcanic tests and VAACs back-up capabilities
- SIGMET collaboration and harmonization
- CAR Part 174
- Competency assessment for AMO & AMF
- ISO 9001: 2015
- Cg-18 and RA V-17 resolutions

# 4 Documents

## ❑ 1 Working Paper

- **PMC-5/WP 11.1:** Progress on the Pacific Islands Aviation Weather Service

## ❑ 3 Attachments

- **Attachment 1 to PMC-5/WP 11.1:** Information Paper – Progress on the Pacific Island Aviation Weather Service
- **Attachment 2 to PMC-5/WP 11.1:** Draft updated TOR for PIAWS Panel
- **Attachment 3 to PMC-5/WP 11.1:** Progress in implementing PMC-4 decisions

# Background Information

- ❑ Report: Sept 2017 - July 2019
- ❑ PMC-3 established Panel and initial TOR
- ❑ PMC-4 reviewed Panel's TOR
- ❑ PMC-4 decisions
  - Development of regional project
  - Met/CAA/Operators regional meeting
  - Training workshop on ISO 9001: 2015
  - Help PICTs on CAR Part 174 & Part 100
  - Competency assessment
  - Cost recovery regional strategy

# UPDATE -1

- ❑ **Progress on implementing PMC-4 decisions**
- **Develop regional project:** SPREP/GCF SAP Concept Note - Component 2 of the proposal include “Strengthened coordination and improving weather and climate information and services for air navigation and marine and oceans services”.
- **Met/CAA/Operators regional conference:** South-west regional conference on meteorology for aviation in 2020
- **Cost recovery regional strategy**
  - ❖ ICAO MET Panel Working Group on Met Cost Recovery and Guidance (MCRGG) job card - to develop appropriate guidance on cost recovery aspects of sub-regional, regional, multi-regional or global service provision
  - ❖ ICAO APANPIRG MET SG and MET/S WG agreed to assign State(s) or expert(s) to assist the PMC PIAWS Panel with development of an effective cost recovery strategy

# UPDATE - 2

## ☐ Progress on implementing PMC-4 decisions

### ➤ Help PICTs on Civil Aviation Rule (CAR) Part 174 compliance

- ❖ Expert from Solomon Islands assisted to draft CAR Part 174 – Aviation Meteorology Exposition Document for Samoa Met Division
- ❖ PNG Civil Aviation Safety Authority (CASA) awarded renewal of certificate authorizing PNG NWS to provide the following aviation meteorological services within the Port Moresby FIR and aerodromes (21 June 2019 – 21 Dec 2020)
- ❖ Civil Aviation Authority Solomon Islands (CAASI) to renew certificate for Solomon Islands Met in near future
- ❖ Kiribati Met and CAA are waiting for auditing by the CAA NZ, as engaged by the Pacific Aviation Safety Office (PASO)
- ❖ Fiji Met and Civil Aviation Fiji (CAAF) working on the CAR Part 174 corresponding document which is the Aviation Meteorology Exposition Document.
- ❖ Vanuatu CAR Part 174 - the Aviation Meteorology Exposition Document in progress

# UPDATE - 3

## ❑ Air navigation deficiencies in MET field

- APANPIRG/28 (September 2017) noted updates on the correction action plan implementation provided by Tonga with respect to deficiency AP-MET-17 – Volcano report). APANPIRG may remove the deficiency subject to the concurrence of ATS units, MWOs and VAACs concerned. VAAC Wellington is now working with Tonga Met Service on a series of tests to demonstrate proficiency on providing volcano observation information
- Solomon Islands reported to ICAO progress of its corrective action plans on deficiencies (AP-MET-01 – Aerodromes meteorological observations or reports; AP-MET-23 – MWO or SIGMET Information, AP-MET-20 – WAFS Forecasts and/or flight briefing). However due to lack of sufficient data to support the validation by the ICAO (and Member States and appropriate international organizations where required) of the corrective action taken, deficiencies have not removed from the open list. APANPIRG MET/S WG will assist Solomon Islands to perform the OPMET monitoring to support the validation of the corrective action and to prepare the full report to enable APANPIRG to remove the deficiencies.
- Kiribati and Nauru have taken corrective actions to address their deficiencies (AP-MET-02 & AP-MET-21 - Aerodromes meteorological observations or reports, but have not yet submitted reports to ICAO APANPIRG MET/S WG

## ❑ Coordination with ICAO Asia - Pacific Regional Office

- Chair of PIAWS Panel represented the PMC and the Panel as well as Tonga, and participated in the 21<sup>st</sup> Meeting of the ICAO APANPIRG Meteorological Subgroup (MET SG/21) (Bangkok, Thailand, 29 May – 1 June 2017). Six other ICAO Member States from the Pacific region (Australia, Fiji, Nauru, New Zealand, and USA) participated in the MET SG/21.
- 3 ICAO Member States from the Pacific region (Australia, New Zealand, USA) participated in the 22<sup>nd</sup> Meeting of the ICAO APANPIRG Meteorological Sub-Group (MET SG/22) (Bangkok, Thailand, 18-21 June 2018).
- 5 ICAO Member States from the Pacific region (Australia, Fiji, New Zealand, Solomon Islands, and USA) participated in the 23<sup>rd</sup> Meeting of the ICAO APANPIRG Meteorological Sub-Group (MET SG/23) (Bangkok, Thailand, 17-20 June 2019. Mr Solomon Sammy represented PIAWS Panel as well as Solomon Islands in the meeting.



# UPDATE - 5

## ❑ **OPMET data exchange in IWXXM format**

- The Meteorological information (OPMET) exchange in digital form - ICAO Meteorological (Weather) Information Exchange (in XML) Model (IWXXM) format is currently a recommended practice and will become ICAO Annex 3 Standard in November 2020. Amendment 78 to the ICAO Annex 3 specifies that ICAO Member States should disseminate specific meteorological information (i.e., METAR/SPECI, TAF, SIGMET, AIRMET and Volcanic Ash Advisory (VAA) and Tropical Cyclone Advisory (TCA) information) in IWXXM GML

## ❑ **Volcanic tests exercises and VAACs back-up test**

- Amendment 78 to the ICAO Annex 3 related to the use of TEST and EXER indicator for SIGMET and volcanic ash advisory, which would affect volcanic ash exercises (and applies to tropical cyclone advisory and space weather advisory) becomes applicable on 7 November 2019

## SIGMET Collaboration and Coordination

- To address SIGMET cross-boundary between FIRs and requirements for harmonized en-route hazardous weather information.
- Operational SIGMET Coordination (OSC) initiative in south-east Asia, undertaken by MWOs of Indonesia, Malaysia, Singapore, Vietnam, and extended to Australia and Indonesia in 2018
- SIGMET coordination trial between Australian Bureau of Meteorology and Indonesia Bureau of Meteorology, Climatology and Geophysics in 2019.

## Competency assessment and capacity development of AMOs and AMFs

- Tonga Met - trainings of 8 meteorologists.
  - Solomon Islands Met's competency assessments procedure is conducted every five years
- QM/ISO 9001: 2015** – Fiji audit scheduled for 20 & 21 August 2019

# Update - 7

- ❑ **Cg-18 Resolutions** - 5.4/2 (Cg-18); 5.4/3 (Cg-18) & 6.1(2)/1 (Cg-18)
  - Regional Associations to establish regional AMDAR programmes
  
- ❑ **RA V-17 Resolutions** – 4 (RA V-17) & 5 (RA V-17)
  - To organize a regional conference on enhancement of aviation safety, efficiency and regularity
  - South-West Pacific Conference on Meteorology for Aviation planned for 2020

# Recommendations

## The Meeting is invited to:

- ❑ **Note** the report on progress of the Pacific Islands Aviation Weather Services.
- ❑ **Acknowledge** the development partners and ICAO Member States for their continued assistance to the development of aviation weather services in the Pacific region.
- ❑ **Acknowledge** the US NOAA and the University of Hawaii (UH) for their continued support to enable the PIAWS Panel to have its meetings via tele-video-conference facilities.
- ❑ **Review and endorse** the updated TOR for the PIAWS Panel as presented in Attachment 2 to the PMC-5/WP 11.1.
- ❑ **Request** members of the PMC to nominate experts from their countries and organizations, and invite Civil Aviation Authorities (CAAs), International Air Transport Association (IATA), and International Federation of Pilots (IFPL) to nominate representatives, as members of the PIAWS Panel.



# Recommendations Cont.

- ❑ **Request** PMC to endorse the establishment of a PIAWS Panel Task Team (Members: Fiji, New Zealand, and Tonga) on ICAO compliance: (a) to develop a work plan for addressing deficiencies in consultation with the concerned ICAO Member States; and (b) to understand current capabilities with regards to the IWXXM implementation and dissemination and to develop a work plan to assist each ICAO Member State in the Pacific region to meet the IWXXM requirements.
  
- ❑ **Request** PMC to endorse the nomination, through the Chair of the ICAO MET Panel, of an expert from the PIAWS Panel to be a member of the Met Panel Working Group on the Met Cost Recovery Guidance and Governance (MCRGG) Ad Hoc Group addressing actions MCRGG5/01 on the development of recommendations for cost recovery. The expert will be determined by the PIAWS Panel.
  
- ❑ **Encourage** members of the PMC through their MWOs to coordinate with respective national authorities for participating in and coordination with the ICAO Asia-Pacific Regional Office, APANPIRG Meteorology Sub-Group (MET SG) and its Working Groups (WGs), and Volcanic Exercise Steering Group (VOLCEX SG) on activities such volcanic ash test exercises, SIGMET collaboration and harmonization, and VAACs back-up test exercises.



# Recommendations Cont.

- ❑ **Request** PMC to endorse the request to New Zealand to pursue the development of a web portal for Volcano Observatory Notice to Airmen (VONA), subjected to funding.
- ❑ **Recognize** the benefits to implement the PMC decisions which are related aviation weather services, it is very crucial and important for regular coordination and communication with the ICAO APANPIRG MET SG and its WGs, and VOLCEX SG.
- ❑ **Request** SPREP to provide financial support to the PIAWS Panel to coordinate and communicate with, and participate in the ICAO Asia Pacific Regional Office activities and bodies such as the ICAO APANPIRG MET SG and its WGs, and VOLCEX SG.
- ❑ **Request** SPREP to assist members of the PMC to develop Services Agreement or equivalent between National Meteorological Services (NMSs) and CAAs.
- ❑ **Request** Fiji Meteorological Service to develop Services Agreements with other NMSs in the Pacific region on the provision of aviation services.
- ❑ **Acknowledge** Papua New Guinea National Weather Service (PNG NWS) and Solomon Islands Meteorological Service (SIMS) efforts leading to be authorized by their respective CAA under Civil Aviation Rule Part 14 to provide aviation meteorological services.

# Recommendations Cont.

- ❑ **Acknowledge** Fiji Meteorological Service efforts which will lead auditing under ISO 9001: 2015 on 20 and 21 August 2019.
- ❑ **Request** SPREP to organize training for NMSs personnel and auditors on ISO 9001-2015.
- ❑ **Acknowledge** efforts of other members of the PMC which will eventually lead to compliance with Civil Aviation Rule Part 174 and Part 100.
- ❑ **Request** SPREP to continue to provide assistance to members of the PMC to develop Civil Aviation Rule Part 174 corresponding document – the Aviation Meteorology Exposition and CAR Part 100 corresponding documents – the Quality Management System (QMS) manual and Safety Management System (SMS).
- ❑ **Acknowledge** efforts by members of the PMC for compliance with the requirements for competency assessment, and capacity development for the AMOs and AMFs.
- ❑ **Request** SPREP to continue to provide assistance to members of the PMC on competency assessment and capacity development for the AMOs and AMFs.
- ❑ **Welcome** the progress on the planning of the South-West Pacific Conference on Meteorology for Aviation which is planned for 2020; and members of PMC are invited to consider hosting the event.

# THANK YOU



**SPREP**  
Secretariat of the Pacific Regional  
Environment Programme



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