MET/TF/2 — IP/03 13/02/24

## Second Meeting of the North American, Central American and Caribbean Working Group (NACC/WG) Aeronautical Meteorology (MET) Task Force (TF) (MET/TF/02)

Mexico City, Mexico, 27 February to 1 March 2024

Agenda Item 2: Implementation of the Meteorological Services for International Air Navigation

## WMO REGION IV EXPERT TEAM FOR AVIATION (ET-AVI)

(Presented by United States)

EXECUTIVE SUMMARY	
Review of the late November 2023 ET-AVI in person and virtual workshop.	
Strategic Objectives:	<ul><li>Safety</li><li>Air Navigation Capacity and Efficiency</li></ul>
References:	https://community.wmo.int/en/meetings/ra-iv-aviation-workshop

## 1. Introduction

- 1.1 The ET-AVI with support from WMO in Region IV developed an Aviation workshop late last year. Participation was widespread, 30 attendees (16 countries) on site plus up to 80 virtual (9 countries including Ecuador, Colombia, Peru, Brazil). Among the participants were representatives of the aviation authorities of Barbados, Cuba, Honduras, El Salvador and COSESNA.
- 1.2 The workshop was recorded and provided Spanish and English translation. The workshop covered SIGMET, QMS and many other aviation topics critical to the region.

## 2. Discussion

- The primary goal of this workshop was to improve SIGMET availability and accuracy by reviewing current practices, learning new techniques, as well as strengthening the collaboration and coordination between National Meteorological and Hydrological Services (NMHSs). In addition to SIGMETs, TAF consistency, aviation hazards. Topics in QMS and Competencies relevant to the operational forecaster were reviewed. A list of topics from the workshop can be seen below:
  - Overview of the Washington Volcanic Ash Advisory Center (VAAC)
  - Quantitative Volcanic Ash (QVA) overview

- NWS Chat 2.0 updates Communication and coordination between the Washington VAAC, Meteorological Watch Offices (MWO) and State Volcano Observatories (SVO) and ways of improving the exchange of volcanic ash information
- How MWOs use the VAA to produce the SIGMET, communication and handoff between the MWOs.
- How users integrate the WV SIGMET into operations
- Overview of Tropical Cyclone forecasting at the National Hurricane Center (NHC)
- How the Tropical Cyclone Advisory (TCA) is built
- Hurricane Hunting, Latest Techniques, tools and training available to improve WC SIGMET
- Utilizing the TCA in operations, user perspective
- How MWOs typically use the TCA to produce SIGMETs
- Current practices and handoff/communication with adjacent MWOs
- Review of the updated CAR/SAM SIGMET guide
- WS SIGMETs and Aviation Hazards Icing, Turbulence, Thunderstorms, Mountain Waves, Tools and training available
- Cold Fronts- Impacts on Caribbean
- WAFC review and future updates
- Satellite-based AI Tools for Convection
- Aviation hazards from Gap and Downslope Winds in Mountainous Regions and wind shear
- Low level Wind Shear and Low level Turbulence effects on the airlines
- Air Traffic Service and Air Traffic Flow Management (ATFM perspective on MET data and Information)
- TAF Consistency and ICAO ANNEX 3 Interactive, TAF Tips, Dos and Don'ts...
- Interactive Trend Forecasts (TTF)
- Aerodrome Warnings
- Aviation Forecast Discussion (What the TAF isn't telling the user)
- QMS: How it helps you, your office and your customer
- SIGMETS and QMS: Interactive with examples
- Status of QMS Implementation in CMO Member States
- Transforming Quality into Sustainability: A route for the Practical Implementation of Effective Quality Management Systems
- Introduction to Forecaster Competencies
- QMS: Tools and training
- 2.2 WMO Region IV can be seen on the map below. Since Spanish translation is available, there is benefit for Meteorological Services in WMO Region III.



- 2.3 The link to the workshop can be found here: https://community.wmo.int/en/meetings/ra-iv-aviation-workshop
- 3 Conclusion
- 3.1 The Meeting is invited to note the information in this paper.