



Update on the Work of the ICAO Meteorology Panel

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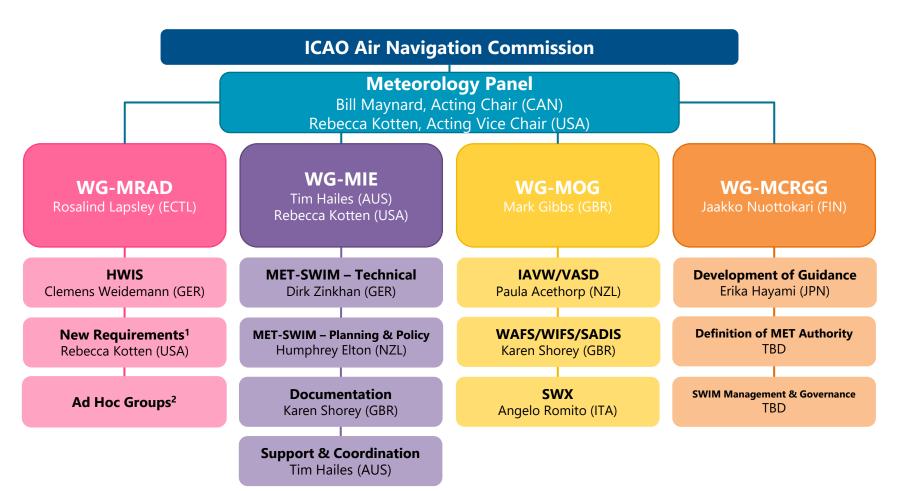
Outline

- Overview of the International Civil Aviation Organization (ICAO) Meteorology Panel (METP)
- ICAO Document Schedule
- METP Working Group Updates
 - Working Group on MET Requirements and Development (WG-MRAD)
 - Working Group on MET Information Exchange (WG-MIE)
 - Working Group on MET Operations (WG-MOG)
 - International Airways Volcano Watch (IAVW) Work Stream
 - Space Weather (SWX) Work Stream
 - World Area Forecast System (WAFS) Work Stream
 - Working Group on MET Cost Recovery Governance and Guidance (WG-MCRGG)
- Future Plans for the METP

Overview of the ICAO METP

- ICAO Air Navigation Commission (ANC) established the METP in 2014; first meeting held in 2015
- METP is responsible for developing proposed Standards and Recommended Practices (SARPs) and technical specifications for:
 - ICAO Annex 3 Meteorological Service for International Air Navigation
 - Procedures for Air Navigation Services Meteorology (PANS-MET)
 - Other guidance material
- METP Membership consists of:
 - 26 ICAO Member States (2 Observers)
 - 7 international organizations
- METP portfolio of work directed by ANC through Job Cards linked to the ICAO Global Air Navigation Plan (GANP)

Overview of the ICAO METP



Acronyms:

- HWIS: Hazardous Weather Information Service
- IWXXM: ICAO
 Meteorological
 Information Exchange
 Model
- SWIM: System-Wide Information Management
- IAVW: International Airways Volcano Watch
- VASD: Volcanic Ash Sulphur Dioxide
- WAFS: World Area Forecast System
- WIFS: WAFS Internet File Service
- SADIS: Secure Aviation Data Information Service
- SWX: Space Weather

¹Includes: De-icing Requirements, Long-Haul Operations Requirements, Terminal Requirements

²Includes: Ice Crystal Observations, Evaluation of IWXXM Extensions, High Altitude Ice Crystals

ICAO Document Schedule

- Many steps between METP endorsement and applicability (ANC review, State consultation process, ANC approval, Council adoption, State letter, etc.)
- Long lead time between development and applicability



ICAO Document Schedule

- ANC review of Fifth Meeting of the METP (METP/5, June 2021) report delayed
 - Initially expected applicability in November 2024; now slips to November 2025
 - Numbering changes from Amd 81 to Amd 82
- Key updates to expect in November 2025:
 - Restructure of ICAO Annex 3 (core SARPs) and PANS-MET (technical specifications)
 - Removal of IWXXM constraints for METAR/SPECI and new IWXXM designs
 - WAFS data formats, issuance of Tropical Cyclone Advisory (TCA) at main synoptic hours, and SIGWX Forecast
 - New Volcano Observatory Notice for Aviation (VONA) and Quantitative Volcanic Ash* (QVA) concentrations for significant VA clouds (*2025)
 - Template improvements for various products
 - Amendments to MET-SWIM Plan, MET-SWIM Roadmap, Manual on IWXXM

METP Working Group Updates

- WG-MRAD
 - Development of Hazardous Weather Information Service (HWIS) to address SIGMET deficiencies
 - Development of requirements for future information services, such as aerodrome observation and forecasts
 - Ad hoc requirements for low- and high-level ice crystals
- WG-MIE
 - Implementation of MET-SWIM services, including developing guidance doc.
 - Continued improvement of availability and exchange of IWXXM data
 - Removal of traditional alphanumeric code (TAC) as a Standard in Annex 3
- WG-MOG
 - WAFS and WIFS/SADIS Work Stream
 - Development of probabilistic datasets and automated SIGWX forecasts

METP Working Group Updates, Cont.

- WG-MOG (cont.)
 - IAVW Work Stream
 - Reviewing the efficacy of Volcanic Activity Report (VAR), updating VONA Guidance, and formulating requirements for SO2 forecasts
 - Developing quantitative volcanic ash (QVA) information
 - SWX Work Stream
 - Developing requirements for regional SWX center
 - Developing key performance indicators (KPIs) for global SWX service
 - Considering next version of SWXA
- WG-MCRGG
 - Finalizing proposed cost recovery mechanism for global SWX service
 - Analyzing data governance issues

Future Plans of the METP

- Holding in-person Working Group and Work Stream meetings to prepare proposals for next Amendment to ICAO Annex 3 and PANS-MET
 - Cross Working Group Progress (CWGP) meeting to be held in April 2024
 - METP/6 to be held in March 2025
- Longer-term efforts for METP:
 - Further development and implementation of IWXXM
 - Adoption and implementation of SWIM services; transition away from "products" and toward "information"
 - Development of HWIS for SIGMET-deficient areas
 - Development of cost recovery mechanisms for multi-flight information region (FIR) or multi-State MET information provision

Thank you!

For questions, concerns, or more information, please contact:

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