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INFORMATION PAPER

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**Fourth Meeting of the North American, Central American and Caribbean Working Group
Implementation of Aeronautical Meteorology (MET) Task Force
(NACC/WG/MT/TF/4)**

Mexico City, Mexico, 28 to 31 July 2026

Agenda Item 3: Follow-up on valid conclusions and decisions from previous NACC/WG and MET/TF meetings

Follow-up on NACC/WG/10 Conclusions and Decisions Related to Aeronautical Meteorology and Progress Reported by the MET/TF

(Presented by the Secretariat)

EXECUTIVE SUMMARY

This Discussion Paper provides a preliminary follow-up on the NACC/WG/10 decisions and conclusions related to aeronautical meteorology, considering the progress, deliverables, and technical inputs presented during MET/TF/4. The review identifies the implementation status of actions related to OPMET IWXXM implementation, promotion of Aircraft-Based Observations (ABO), integration of meteorological and climatological information to strengthen the operational resilience of Air Traffic Service Providers, and regional cooperation among NAM/CAR States.

The information presented is intended to support preparation for NACC/WG/11 by identifying actions that remain valid, activities requiring further strengthening, and issues that may warrant consideration in the development or adjustment of future regional work priorities.

**Strategic
Objectives:**

- Every Flight is Safe and Secure
- Aviation Delivers Seamless, Accessible, and Reliable Mobility for All
- No Country Left Behind

1. Introduction

1.1 During NACC/WG/10, several decisions and conclusions were adopted in support of the implementation of aeronautical meteorological services in the NAM/CAR Regions, including actions related to OPMET IWXXM dissemination, promotion of the Aircraft-Based Observations (ABO) Programme, integration of meteorological and climatological information to strengthen the operational resilience of Air Traffic Service Providers, and regional cooperation in aeronautical meteorology.

1.2 In follow-up to these decisions and conclusions, MET/TF/4 reviewed progress achieved under the 2026 Work Programme, together with the main outcomes of the Technical Seminar and the papers and presentations discussed under Agenda Item 3. DP/01 documented key messages related to digital meteorological information exchange, WIFS API, VONA, QVA, SWIS, IWXXM, SWIM and operational

user needs. DP/02 consolidated progress achieved under the 2026 Work Programme, including IWXXM, METNO, ABO, QMS, VONA, MHEWS, operational resilience, SIGMET coordination, regional cooperation, e-ANP and ASBU/BBB implementation.

1.3 Considering that NACC/WG/11 will be held in the coming months, it is necessary to organize the follow-up of actions derived from NACC/WG/10, identify their preliminary implementation status, and determine those issues requiring continuation, adjustment, or escalation to the next Working Group Meeting.

2. Follow-up of NACC/WG/10 Decisions and Conclusions

2.1 Decision NACC/WG/10/04 – Action Plan for the Implementation of OPMET IWXXM Data Dissemination

2.1.1 Decision NACC/WG/10/04 requested continued progress in OPMET IWXXM data dissemination within the NAM/CAR Regions, including AMHS/FTBP interoperability testing, coordination with AMHS messaging centres, dissemination of OPMET IWXXM data from Cuba to RODB Washington, and participation of the Secretariat, NACC/WG COMM/TF and MET/TF.

2.1.2 MET/TF/4 reported significant progress associated with this decision. These activities included the proposal for a regional METNO mechanism based on online OPMET tables, TAC-IWXXM translation testing, AMHS interoperability testing between Cuba and the United States, identification of common TAC data quality issues, future operational dissemination of METAR and TAF in IWXXM format, and the need for AMHS Extended capabilities with FTBP support for operational exchange of digital meteorological products.

2.1.3 The Technical Seminar also highlighted that IWXXM implementation remains uneven across regions, that future aeronautical meteorological services will increasingly depend on interoperable environments supported by IWXXM and SWIM, and that preparation for API-based services, including WIFS API, should form part of regional digital transformation efforts.

Preliminary Status: Valid, with significant progress.

Proposed Follow-up: Maintain the action until regional OPMET/IWXXM coordination mechanisms, METNO processes, AMHS/FTBP capabilities, and preparation for SWIM-enabled environments are consolidated.

2.2 Decision NACC/WG/10/05 – Promotion of the Aircraft-Based Observations (ABO) Programme

2.2.1 Decision NACC/WG/10/05 requested that the MET/TF and AMCB/TF undertake activities to promote the establishment of aircraft-based meteorological observation sources, particularly within the CAR Region, and that the Secretariat, in coordination with RASG-PA, promote the ABO Programme through awareness campaigns, workshops, and training activities directed at States and operators.

2.2.2 During MET/TF/4, updates were provided on activities conducted with WMO, the ABO Programme, ET-AVI, ET-ABO and the SURV/TF, as well as technical coordination with COCESNA and

SENEAM to explore the potential of ADS-B, ADS-C, Mode S EHS, MRAR and other regional capabilities that could support future aircraft-derived meteorological observation initiatives.

2.2.3 The WMO ABO Programme presentation highlighted that limited upper-air observations continue to affect numerical weather prediction performance and that aircraft-based observations represent a viable means of reducing regional observational gaps. The discussions also identified requirements extending beyond the direct scope of the MET/TF, including funding mechanisms, coordination among NMHSs, MET providers, ANSPs, Civil Aviation Authorities, operators and other specialized technical groups.

Preliminary Status: Valid, with partial progress and a need for reformulation.

Proposed Follow-up: Maintain the topic as an active work item while expanding its scope from AMDAR toward a broader framework addressing aircraft-based observations and emerging observation technologies, supported through ICAO-WMO coordination and engagement with relevant regional groups.

2.3 Decision NACC/WG/10/06 – Integration of Meteorological and Climatological Data to Strengthen the Operational Resilience of Air Traffic Service Providers

2.3.1 Decision NACC/WG/10/06 requested that the MET/TF analyse mechanisms for integrating meteorological and climatological data into the hazard identification processes of Air Traffic Service Providers and report to NACC/WG/11 on potential tools to improve contingency planning and emergency response.

2.3.2 MET/TF/4 presented substantial progress related to the use of aeronautical climatological information to support operational resilience, capacity management, strategic planning, air traffic flow management, risk assessment and decision-making by Air Navigation Service Providers.

2.3.3 Operational needs were also identified in relation to TAF quality for ATC and ATFM, forecasting and diagnosis of turbulence and wind shear, graphical and intuitive products for non-meteorological personnel, convective weather visualization, integration of meteorological and climatological information into ATM, ATFM, A-CDM and risk management processes, and preparedness for severe weather, volcanic ash, tropical cyclones and climate-related threats.

2.3.4 DP/01 further reflected the operational perspective presented by AEROMEXICO, which emphasized the need to more explicitly address operational user requirements, including TAF verification, availability of real-time observations, airport climatological information, and products supporting significant weather events.

Preliminary Status: Valid, with substantial progress.

Proposed Follow-up: Continue the activity with greater emphasis on products, tools and methodologies that support the integration of meteorological and climatological information into operational planning, ATFM, A-CDM, SMS, ATS contingency planning and airport resilience.

2.4 Conclusion NACC/WG/10/07 – Cooperation in Aeronautical Meteorology among NAM/CAR States

2.4.1 Conclusion NACC/WG/10/07 invited interested States, including Cuba, Mexico, the United States and COCESNA, to consider cooperative arrangements in aeronautical meteorology to consolidate regional efforts, promote collaborative expert activities through the Tulum Meteorological Watch Office, and strengthen regional capabilities through technical and operational cooperation.

2.4.2 During MET/TF/4, Mexico reported on activities undertaken to promote regional cooperation in aeronautical meteorology through the Tulum Meteorological Watch Office, including regional cooperation initiatives, exchange of experts, training workshops, operational attachments and other forms of technical collaboration among NAM/CAR States.

2.4.3 During discussions on regional cooperation and SIGMET coordination, Mexico also reported progress related to the future implementation of NWSChat as an operational collaboration tool. Honduras expressed interest in participating and indicated its intention to engage with the designated focal points to explore future involvement in regional SIGMET coordination activities.

Preliminary Status: Valid, with partial progress.

Proposed Follow-up: Maintain the conclusion as active until interested States formalize, as appropriate, specific agreements, cooperation mechanisms or collaborative activities that may be reported to NACC/WG/11.

3. Considerations for Preparation of NACC/WG/11

3.1 Based on the progress reported during MET/TF/4, the NACC/WG/10 decisions and conclusions related to aeronautical meteorology remain relevant and have generated concrete implementation activities. However, none should be considered completed without an assessment of expected outcomes, deliverables achieved and outstanding actions.

3.2 Decisions NACC/WG/10/04 and NACC/WG/10/06 demonstrate significant progress and may be presented to NACC/WG/11 as examples of effective follow-up through specific MET/TF work programme activities.

3.3 Decision NACC/WG/10/05 requires a review of its scope, as regional discussions have evolved beyond the promotion of AMDAR towards a broader framework addressing aircraft-based observations and emerging observation capabilities that require coordination across multiple institutions and technical groups.

3.4 Conclusion NACC/WG/10/07 remains relevant; however, additional follow-up is required to determine whether regional cooperation initiatives will translate into verifiable agreements, expert exchanges, collaborative activities or other tangible mechanisms before NACC/WG/11. affected by ionospheric propagation, and radiation-related considerations. This topic could remain an area of familiarization and knowledge-building within future MET/TF activities.

4. Action by the Meeting

4.1 The Meeting is invited to consider the elements identified in this paper to:

- a) review the preliminary follow-up status of the NACC/WG/10 decisions and conclusions related to aeronautical meteorology; and
- b) provide guidance on the actions required to consolidate progress achieved, address pending issues, and support the MET/TF contribution to NACC/WG/11.

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