

International Civil Aviation Organization

WORKING PAPER (WP/09)

ICAO Asia and Pacific (APAC) Twenty-Ninth Meeting of the Meteorology Sub-Group (MET SG/29)

Bangkok, Thailand, 18 - 22 August 2025

Agenda Item 3: Air navigation deficiencies.

UPDATE ON MET DEFICIENCY AP-MET-20

Presented by Solomon Islands

SUMMARY

This paper outlines the work undertaken by the Solomon Islands on resolving the APANPIRG Air Navigation deficiency AP-MET-20.

1. INTRODUCTION

- 1.1 The APANPIRG Air Navigation deficiency (AP-MET-20) specifies that World Area Forecast System (WAFS) forecasts are not available for inclusion in flight briefings and documentation for the Solomon Islands. The Solomon Islands Meteorological Services (SIMS) has implemented corrective action plan to resolve this deficiency. Progress updates were provided during the Twenty-Seventh Meeting of the Meteorological Sub-Group (MET SG/27) in September 2023, and the Fourteenth Meeting of the Meteorological Requirements Working Group (MET/R WG/14) in May 2025.
- 1.2 This paper presents the corrective action plan and implementation undertaken by SIMS on the provision of WAFS forecasts.

2. DISCUSSION

Corrective Action Plan and Implementation

- 2.1 SIMS contributes to the safety, regularity, and efficiency of civil air navigation in the Solomon Islands. It provides aerodrome meteorological reports (METAR), aerodrome forecasts (TAF) and other aviation meteorological products and services to the Solomon Islands Airport Corporation Limited (SIACL) Air Traffic Services (ATS), in compliance with ICAO/WMO standards and recommended practices. SIACL ATS disseminates these reports to airlines and other users via the Aeronautical Fixed Service (AFS).
- 2.2 Under the Letter of Agreement (LOA) with SIACL and the Memorandum of Agreement (MOA) with Solomon Airlines, SIMS provides the following products and services to ATS:
 - METAR and SPECI
 - TAF and TAF3
 - Area QNH

SIGMET

Additionally, other aviation weather products, including WAFS forecasts, are made available via the SIMS website: https://met.gov.sb/

Evidence of MET deficiency resolution

- 2.3 Availability of WAFS forecasts.
 - 2.3.1 A WAFS Forecast Procedure <u>Reference ID Pro17 WAFC</u> has been prepared to guide duty forecasters on the procedures for posting and updating the WAFS SIGWX products on the SIMS MET website. The procedures are attached as Appendix 1 to this paper.
 - 2.3.2 Access to the SIMS website has also been provided to Solomon Airlines for retrieving WAFS SIGWX forecasts. A confirmation email was received from Solomon Island, which also outlined their internal procedures for utilising the available WAFS SIGWX forecasts on the website (refer to Appendix 2 for details).
 - 2.3.3 The screen captures of WAFS SIGWX forecasts available on the SIMS website are included in Appendix 3 of this paper, serving as evidence of forecast availability for users.
- 2.4 The Solomon Islands presented Information Paper IP/02 MET AND ATS STAKEHOLDERS' COLLABORATION IN SOLOMON ISLANDS at the MET/R WG/14. The MET/R WG/14 agreed to Action MET/R WG/14-01, requesting the Secretariat, in coordination with the ad hoc group on air navigation deficiencies, to assist the Solomon Islands in preparing the appropriate report detailing the rectification of the deficiency AP-MET-20 for further consideration at MET SG/29.
- 2.5 This paper serves as a follow up to that action and provides additional information and supporting evidence on resolving the deficiency AP-MET-20.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note the information contained in this paper; and
 - b) formulate a Draft Conclusion for the removal of the deficiency AP-MET-20 from the APANPIRG Air Navigation Deficiency Database.

Appendix 1: WAFC Forecasting Preparations for Pilot Briefing Procedure

WAFC Forecasting Preparations for Pilot Briefing Procedure

Role	Name	Signature (upon agreement)	Date
CMO - Forecaster	Mr. Manoah Tepa		23/07/2025
Quality Assurance Manager:	Mr. Solomon Sammy		23/07/2025
Director (SIMS):	Dr. Alick Haruhiru		23/07/2025

Document Information

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Version	Issue Date	Changes	
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WAFC Forecasting Preparations for Pilot Briefing Procedure

1. SCOPE

This procedure provides guidance to duty Forecasters on the preparations and updating of WAFC Forecast for flight planning briefing.

2. PURPOSE

- 2.1. This Procedure is applicable for implementing by all duty Forecasters at all times daily.
- 2.2. Duty Forecasters to ensure that WAFC Forecasts at the MET website is prepared and updated daily at 6am and 12pm to the Website.
- 2.3. WAFC Forecasts for Solomon Islands is covered by AREA F; this covers the full Pacific Region including Solomon Islands.

3. GENERAL OVERVIEW:

3.1. WAFC Forecasts.

WAFC stands for World Area Forecast Centres. In the early 1980s, the International Civil Aviation Organization (ICAO) developed the World Area Forecast System (WAFS) to provide seamless forecasts of upper air winds, temperatures, and significant weather hazards, enhancing safety and identifying potential delays. Two World Area Forecast Centres (WAFCs) were established to deliver this information: one operated by the National Oceanic and Atmospheric Administration (NOAA) in the USA and the other by the UK Met Office.

3.2. SIGWX Forecasts:

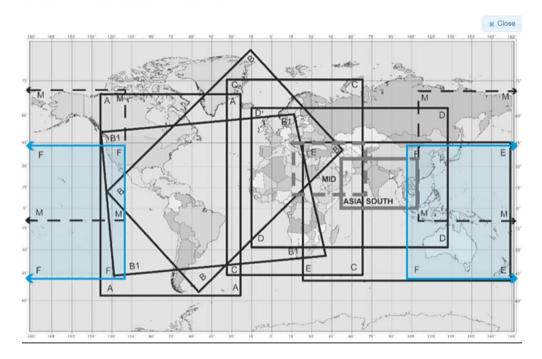
SIGWX charts are essential for pilots, providing a broad overview of significant weather relevant to their flight. Elements visible in these charts include jet streams (wind speeds exceeding 80 knots), areas of cumulonimbus clouds and turbulence, erupting volcanoes, and tropical cyclones.

3.3. Global gridded WAFS data sets:

WAFC produce global gridded data sets of wind and temperature for efficient flight planning, as well as gridded data sets of hazardous phenomena like cumulonimbus clouds, clear air turbulence, and icing. This data can be integrated into flight planning software, playing a crucial role in decision-making. Full details of the WAFS data sets available via SADIS can be found on the SADIS pages.

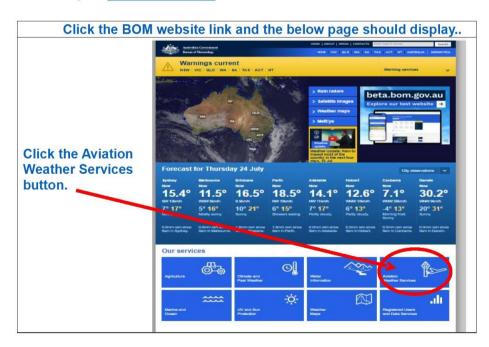
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4. WAFC FORECASTS - AREA F.



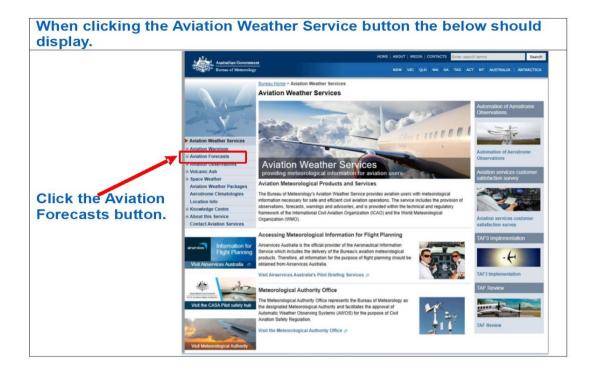
5. STEPS FOR PREPARATING WAFC FORECASTS.

5.1. Step1 – www.bom.gov.au



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5.2. Step 2: Aviation Weather Services.



5.3. Step 3-Aviation forecasts



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5.4. Step 4- SIGWX



5.5. Step 5- Area F -High-level SIGWX

(FL250-FL600): 00z | 06z | 12z | 18z



) SIMS WAFS Procedure

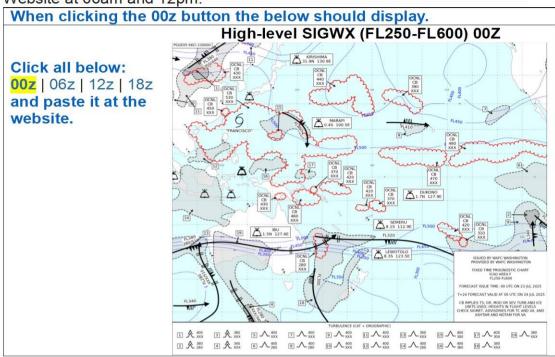
Version: 01

Dated: 23rd July 2025

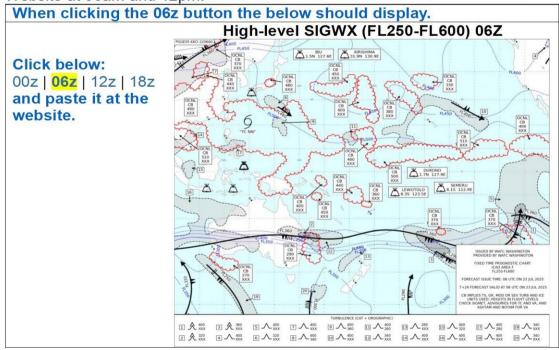
Page | 5

5.6. Step 6 – Updating tasks should be done at 6am and 12pm.

All WAFC Forecasts a 00z 06z | 12z | 18z should be copy and paste to Website at 06am and 12pm.

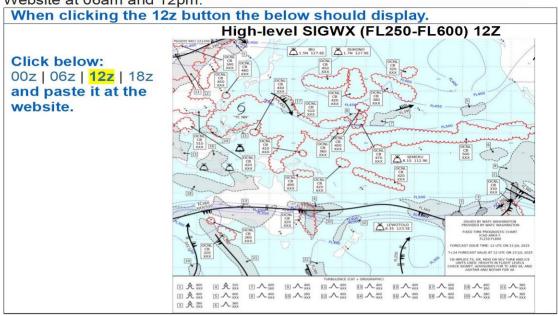


All WAFC Forecasts at 00z 06z 12z | 18z should be copy and paste to Website at 06am and 12pm.

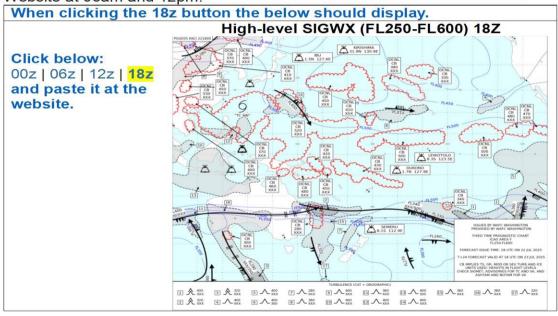


SIMS WAFS Procedure Version: 01 Dated: 23rd July 2025 Page | 6

All WAFC Forecasts at $\underline{00z} \mid \underline{06z} \mid \underline{12z} \mid \underline{18z}$ should be copy and paste to Website at 06am and 12pm.



All WAFC Forecasts at $00z \mid 06z \mid 12z \mid 18z$ should be copy and paste to Website at 06am and 12pm.



MS WAFS Procedure Version: 01 Dated: 23rd July 2025 Page | 7

Appendix 2: Confirmation email from Solomon Airlines – access to WAFS forecast via SIMS website



Eileen B. Mataki <emataki@flysolomons.com>

Solomon Sammy; Daniel Bugotu 🕶

Fw: Weather charts for H4-SOL crew

1:01 AM. You replied to this message on 23-Jul-25 11:01 AM.

This message is part of a tracked conversation. Click here to find all related messages or to open the original flagged message.

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.



Good day Solomon,

The below was the work process created to ensure my team issue the weather charts to pilots. WAF ICAO Area F charts.

We now print the charts for our Dash8 crew for their flights

Will this be sufficient evidence for towards your audit item?

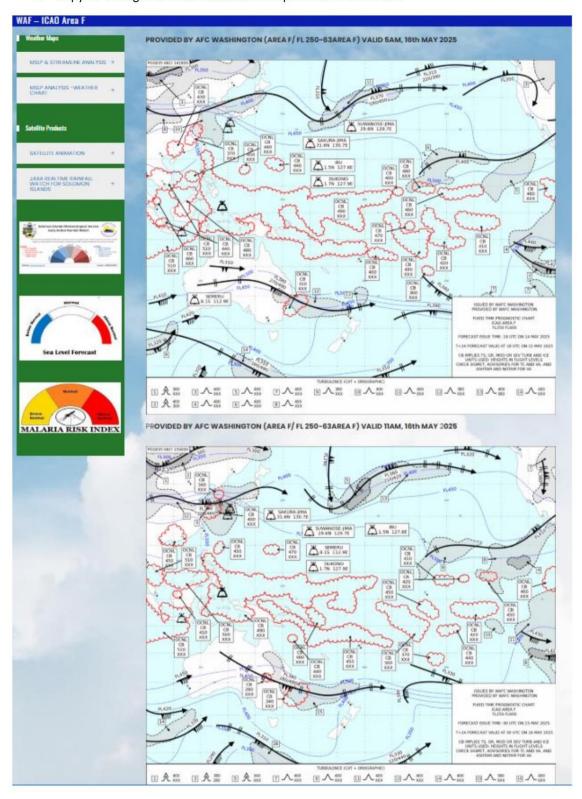
Best regards, Eileen Mataki

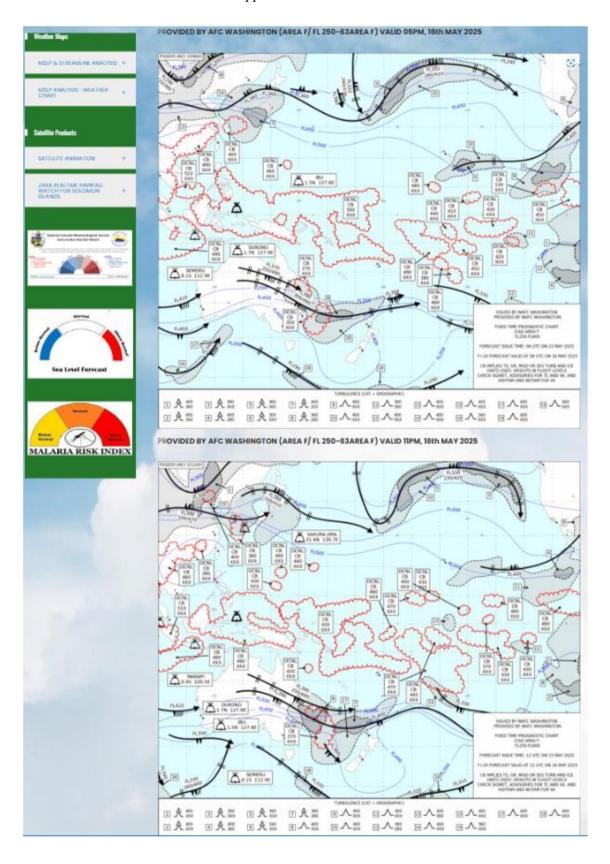
How to search and print Aviation Weather // WAF – ICAO Area F.

- 1. Enter www.met.gov.sb / SIMS site.
- 2. Click Aviation Weather Forecast.
- 3. Select WAF ICAO Area F



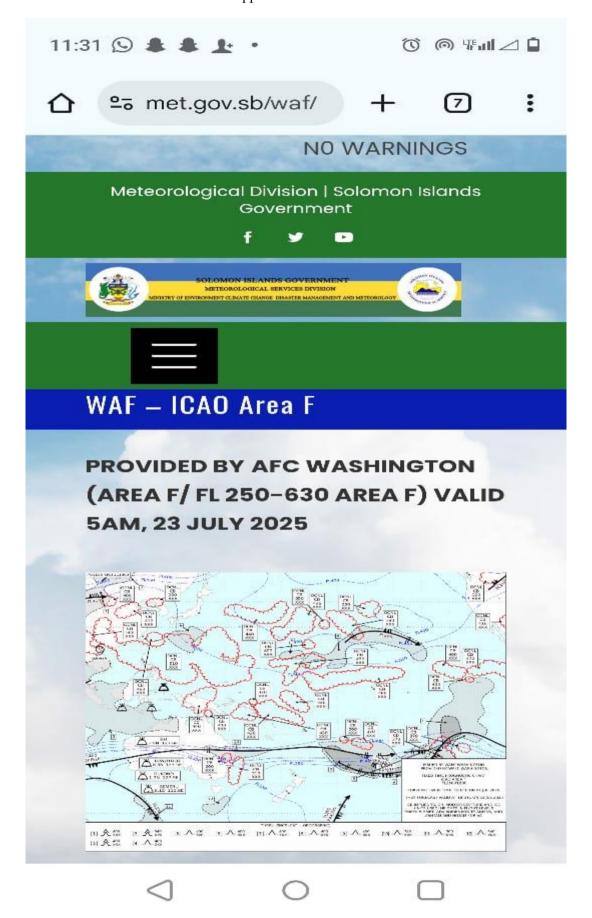
- 4. 4 Charts will show. Forecast issue 05AM / 11AM / 05PM / 11PM
- 5. Copy all 4 Images to word document and print for H4-SOL crew.



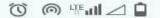


Appendix 3: <u>Screen capture of WAFS forecasts available on SIMS website on 23/07/2025</u>









PROVIDED BY AFC WASHINGTON (AREA F/ FL 250-630 AREA F) VALID 11AM 23 JULY 2025







PROVIDED BY AFC WASHINGTON (AREA F/ FL 250-630 AREA F) VALID 5PM, 23 JULY 2025



