

*International Civil Aviation Organization***INFORMATION PAPER****ICAO**

**Eighteenth Meeting of the Meteorological Information
Exchange Working Group (MET/IE WG/18)
and
Tenth Meeting of the Meteorological Services
Working Group (MET/S WG/10)**

Web-conference, 27 to 31 July 2020

Agenda Item 10: Guidance and education related to the provision of meteorological services**THREE-HOURLY UPDATE OF AERODROME FORECASTS (TAF3)**

(Presented by Australia)

SUMMARY

Australia is planning the implementation of an Aerodrome Forecast (TAF) service with an routine update frequency increased from a six-hourly to a three-hourly at its major civil and military airports. This new service has been named TAF3 and will replace Australia's current Trend Forecast (TTF) service, which is not as widely used by international operators as the TAF. This change should therefore provide an improved service for the wider group of international operators.

1. INTRODUCTION

1.1 The Australian Bureau of Meteorology completed a review of its Trend Forecast service in response to requests from the Australian aviation industry to investigate feasible alternative options.

1.2 The Trend Forecast Review final report recommended replacing the current Trend Forecast (TTF) service with an Aerodrome Forecast (TAF3) routinely issued three-hourly and proactively amended with latest forecast information.

1.3 The TAF3 will be the same format as an Annex 3 Aerodrome Forecast (TAF) noting Australian differences.

1.4 A tentative date for cessation of the TTF service and implementation of the TAF3 service has been proposed for 5 November 2020.

2. DISCUSSION

2.1 Annex 3 Section 6.3 states that Landing Forecasts (prepared in the form of a Trend Forecast) should be valid for 2 hours. Australia currently provides a Trend Forecast in a different format and with a validity of 3 hours. These are appended to METAR/SPECI at eight of Australia's major civil airports and eight military airports.

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2.2 The TAF3 service will exceed Annex 3 Section 6.2.6 Recommendation for routine TAF valid for 12 to 30 hours to be issued every 6 hours. TAF3 will be issued **at least** every three hours. Australia also provides METARs every half hour and SPECIs as required, which also exceeds the Annex 3 requirement of providing hourly.

2.3 The new TAF3 service will be provided for Australia's ten busiest civil airports (Sydney, Melbourne, Brisbane, Perth, Adelaide, Gold Coast, Cairns, Canberra, Darwin and Hobart) and military aerodromes with a current TTF service.

2.4 The implementation of the TAF3 service will result in improved services and safety for aviation stakeholders because:

- **It is a simpler system.** There will be a single accurate forecast available for the aerodrome which is well known to local and international operators.
- **It will eliminate any potential ambiguity between the TAF and TTF.**
- **It will eliminate alignment issues.** There are currently periods when TAF and TTF are not well aligned due to the TAF being amended up to an hour after the TTF. TAF3 will be amended immediately as required.
- **The new TAF3 is extended to two additional airports** that do not currently have a TTF service (Gold Coast and Hobart).
- **The new TAF3 will operate 24/7 at all locations** including Darwin and Canberra where there is currently no overnight TTF service.
- **It enables a more effective use of time.** The replacement of TTF with TAF3 is expected to enable a more effective use of aviation meteorologists' time during periods of fluctuating or marginal weather situations.

2.5 The TAF3 will become the primary forecast in the first three hours instead of the TTF and will be amended to provide similar responsiveness to the TTF. It will be issued routinely every three hours, provide the same 24 or 30 hour forecast as the current TAF, with this validity updated every six hours, and will be identical in code format as the standard TAF. The TAF3 will be issued from the associated meteorological office 30-60 minutes prior to the forecast validity start time, with a target issue time of 45 minutes prior. Like all aerodrome forecasts, TAF3 is kept under continuous weather watch. As a premium service, the TAF3 will receive priority pro-active amendments to ensure the TAF contains the latest forecast information.

2.6 Aviation meteorologists will be provided with additional training to minimise using PROBs in the first three hours of a TAF3 in order to limit any prolonged periods of PROB periods affecting operations. During periods of marginal or fluctuating weather situations, the aviation meteorologist will look for clear weather periods in the next three hours and issue amendments where appropriate.

2.7 Australia's new standard practice of issuing a TAF for major civil and military airports every three hours (the TAF3), will match current practices in the USA and Canada.

2.8 The replacement of TTF with TAF3 leads to the requirements for an update to Table MET II-2 in Part V of the APAC Air Navigation Plan Volume II. This will be submitted separately to the ICAO APAC office through a Proposal for Amendment (PfA), once an implementation date is confirmed.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Note the information contained in this paper and visit <http://www.bom.gov.au/aviation/taf3/> for the most up to date information relating to the project.
