



Agenda Item 13: Quality Assurance/Performance Monitoring MET Fields

AUTOMATED TAF VERIFICATION/IMPROVEMENT SYSTEM

(Presented by Australia)

SUMMARY

This paper discusses the use of the information generated by the automated Terminal Aerodrome Forecast (TAF) verification/improvement programme used by Australia.

1. Introduction

1.1 The automated TAF verification/improvement system software was developed by the Australian Bureau of Meteorology a number of years ago to monitor TAF performance. By-products of the system include a range of useful information outputs unrelated to TAF performance monitoring.

2. Information Generated and Application

2.1 By comparing TAF with corresponding observations the software generates a large range of reports on TAF performance.

2.2 A number of simple indicators are generated for reporting to Government and the Aviation Industry. A more complex comparison of TAF and observations is available for internal use by forecasters and for aviation program management.

2.3 The system output is in HTML which allows forecasters and managers access via the Bureau's intranet. The system allows users to define verification thresholds of ceiling, visibility and wind parameters, as well as TAF issue, lead-time and time of day.

2.4 The software produces a number of report types containing different information. Examination of a combination of reports enables a detailed analysis of TAF performance including identification of un-forecast poor weather occurrences and a breakdown of false alarms.

2.5 One of the fundamental roles of the system is to identify and monitor forecast biases, both by office and by individual forecaster.

2.6 The application of the system has led to the generation of very useful information that is not related to TAF performance. This includes detailed (hourly) climatologies of cloud, visibility and thunderstorms; comparison of automatic ceiling and visibility measurements with human observation; and through the application of quality control to the input data, identification of missing data and errors in forecasts and observations.

3. **Conclusion**

3.1 The meeting is invited to note the quality assurance/performance monitoring work being undertaken by Australia and the information made available through the process.

3.2 For further information you can contact Mr Ted Williams, Assistant Manager Aviation Weather Services. His e-mail address is: t.williams@bom.gov.au