



*International Civil Aviation Organization*

**THE ELEVENTH MEETING OF ASIA/PACIFIC ROBEX  
WORKING GROUP (ROBEX WG/11)**

Bangkok, Thailand, 11 – 13 March 2013

**Agenda Item 2: OPMET Data**

**PROPOSED AUTOMATION OF NEW ZEALAND INTERNATIONAL METARS**

(Presented by New Zealand)

**SUMMARY**

This paper provides information concerning the proposed automation of METAR observations at Auckland, Wellington and Christchurch international airports.

**1. INTRODUCTION**

1.1 The Asia Pacific Basic Air Navigation Plan, Part VI, outlines the operational requirements concerning the provision of aeronautical meteorology in the region. A listing of the AOP aerodromes in the Region is included in the ASIA/PAC FASID, and details of the OPMET exchange is provided in the ROBEX Handbook. These documents note that there are three AOP aerodromes in New Zealand. At present, manual METAR and SPECI are provided at these aerodromes 24/7.

1.2 It is proposed to automate the METAR programmes at the three New Zealand international aerodromes at Auckland, Wellington and Christchurch.

**2. DISCUSSION**

2.1 Meteorological Service of New Zealand Ltd (MetService) has submitted a proposal to the New Zealand ICAO Meteorological Authority (a Civil Aviation Authority responsibility) to automate the aerodrome reports at the three international aerodromes. This will involve replacing METAR and SPECI reports with METAR AUTO to be issued at 30 minutes intervals, which in accordance with ICAO Annex 3 4.4.2 b), eliminates the requirement for SPECI.

2.2 TREND forecasts will be appended to METAR AUTO in accordance with Annex 3 6.3.

2.3 METAR AUTO reports are currently produced for 27 domestic aerodromes in New Zealand. The transition from manual METARs between 2008 and 2010 was very successful, with availability of the scheduled 24-hour observations (at 30 minute intervals) exceeding 99% and overall excellent user acceptance of the automated METAR programme.

2.4 Consultation with the main international airlines servicing New Zealand, along with industry groups, shows users are confident of MetService’s ability to operate effective and reliable METAR AUTO programmes at the international airports.

2.5 Although the domestic METAR AUTO system has been extremely reliable, with delivery in excess of 99%, additional system redundancy is proposed to ensure the utmost reliability for international METARs. This will involve establishing fully equipped duplicate automatic weather stations at Auckland, Wellington and Christchurch aerodromes.

2.6 MetService also proposes to implement a process of aviation forecaster vetting prior to the issue of each METAR AUTO, with forecasters verifying and, if necessary, editing the reports prior to dissemination. Forecasters conducting the vetting will draw on their knowledge of the current weather situation as well as high-resolution radar, satellite, webcam imagery and Airways NZ ATIS reports.

2.7 Further, the MetService proposal is for two webcams to be installed at each of the international airports, aligned to the two main runway directions, with live imagery from the cameras displayed on forecaster workstations.

2.8 The proposed commencement date for METAR AUTO reports replacing manual METARs at New Zealand international aerodromes is 1 July 2013.

### **3. FURTHER PROCESS**

3.1 The Meteorological Authority (CAA NZ) will shortly evaluate MetService’s proposal to implement METAR AUTO at Auckland, Wellington and Christchurch International aerodromes.

3.2 Should the Meteorological Authority formally concur with the automation and associated recommendations from MetService, it will advise ICAO and provide the necessary change requests for all relevant ICAO documents.

### **4. ACTION BY THE MEETING**

4.1 The meeting is invited to note the information in this paper.

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