Aviation Safety Investigation Report 199501082

Cessna Aircraft Company Skyhawk

06 April 1995

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

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The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number: 199501082 Occurrence Type: Incident

Location: Devonport

State: TAS Inv Category: 4

Date: Thursday 06 April 1995

Time: 1510 hours **Time Zone** EST

Highest Injury Level: None

Aircraft Manufacturer: Cessna Aircraft Company

Aircraft Model: 172N

Aircraft Registration: VH-NIT Serial Number: 17271823

Type of Operation: Commercial Other

Damage to Aircraft: Nil

Departure Point: Devonport TAS

Departure Time:

Destination: Devonport TAS

Approved for Release: Friday, December 22, 1995

The purpose of the flight was to conduct an instrument rating renewal which included an instrument approach to Devonport. As the aircraft broke clear of cloud, the pilots became concerned that the aircraft was considerably lower than expected. Flight instrument indications appeared normal, both during and after the flight. Subsequently, the supervising pilot queried the Melbourne Regional Briefing Office (RBO) regarding the accuracy of the Automatic Terminal Information Service (ATIS) broadcast, on which the instrument approach had been conducted.

The pilot believed that the QNH was in error by approximately 12 hectopascals (hPa), resulting in the aircraft being approximately 360 ft lower than expected, and the wind was from the opposite direction.

Checks by the RBO indicated that the Bureau of Meteorology had not issued a current Devonport aerodrome Meteorological Report (METAR). This was due to the report message generated by the automatic weather station at Devonport being rejected by the Bureau of Meteorology computer.

The relevant air traffic service (ATS) officer had unknowingly broadcast an invalid Devonport METAR stored within ATS computer systems. Internal investigations by ATS revealed that as a result of a software problem, and the absence of a current Devonport METAR, the previous issue (24 hours old) had been retained and broadcast in error. Had a new, valid METAR been received it would have over-written the older, invalid message.

The QNH used for the approach was 1010 hPa in lieu of the actual 996 hPa, placing the aircraft approximately 420 ft lower than expected. The ATS computer system does not provide the origin time of the METAR. This was a fail unsafe deficiency.

The Civil Aviation Authority took immediate actions to prevent a recurrence by implementing revised procedures in the national communications centre.

The following factors contributed to the development of the occurrence:

- . The Devonport automatic weather station report was rejected by the Bureau of Meteorology computer.
- . ATS officer unknowlingly broadcast an invalid metar.
- . ATS computer error.
- . ATS computer failure to provide message origin time for metar.
- . This resulted in the pilot being provided with an incorrect QNH.