

**Aviation Safety Investigation Report
199800411**

**Boeing Co
B747**

05 February 1998

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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.

199800411

Occurrence Number: 199800411 **Occurrence Type:** Incident
Location: Melbourne, Aerodrome
State: VIC **Inv Category:** 4
Date: Thursday 05 February 1998
Time: 0914 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Boeing Co
Manufacturer:
Aircraft Model: 747-438
Aircraft Registration: VH-OJR **Serial Number:** 25547
Type of Operation: Air Transport High Capacity International Passenger
Scheduled
Damage to Aircraft: Nil
Departure Point: Auckland New Zealand
Departure Time:
Destination: Melbourne Vic.

Approved for Release: Tuesday, July 14, 1998

FACTUAL INFORMATION

The aircraft departed Auckland for a scheduled flight to Melbourne. Weather forecasts available to the crew indicated that the weather at the estimated arrival time of 2210 UTC would be a variable wind of 5 kts and CAVOK conditions. A trend type forecast (TTF) was issued at 2000 and indicated that the wind was calm with 1 okta of cloud at 1,000 ft. The forecast was appended with the term NOSIG which indicated that there was no significant change due in the next 3 hours.

The automatic terminal information service at 2109 indicated that the cloud now was 6 oktas at 400 ft with lower patches and that the visibility was 4,000 m in fog. The aircraft at this time was past the point at which it could divert to an alternate aerodrome. A special weather report (SPECI) was issued at 2130 and indicated that the cloud would be 7 oktas at 200 ft and that the visibility would still remain at 4,000 m. These conditions were below the alternate minima for the airport, and the aircraft was not carrying additional fuel to divert.

The aircraft landed uneventfully at 2214 after becoming clear of cloud at the minimum altitude with an estimated visibility of 800 m.

ANALYSIS

A report from the Bureau of Meteorology indicated that a number of local conditions contributed to the incident. There was an area of low cloud that was situated over the centre of Melbourne city and this did not extend to the airport. The dewpoint in the area was considerably higher than normal at 14 degrees. The layer of cloud was thin and was expected to be eroded by the sun. However, it had risen considerably and commenced surface heating.

There was also a northerly wind at approximately 5 kts and this was thought to assist in keeping the cloud to the south of the airport and over the city. However, a weak eddy formed and forced the cloud layer to move to the north and the base to become considerably lower than first forecast.

A similar meteorological situation was present a few days after the occurrence and in that case, no cloud formed at the airport.

