Aviation Safety Investigation Report 199900655

Boeing Co
B747

21 February 1999

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Aviation Safety Investigation Report

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Occurrence Number: 199900655 **Occurrence Type:** Incident
Location: 9km NNW Melbourne, Instrument Landing System
State: VIC **Inv Category:** 4
Date: Sunday 21 February 1999
Time: 2344 hours **Time Zone** ESuT
Highest Injury Level: None

Aircraft Manufacturer: Boeing Co
Aircraft Model: 747-100
Aircraft Registration: N852FT **Serial Number:** N852FT
Type of Operation: Air Transport Cargo High Capacity International
Damage to Aircraft: Nil
Departure Point: Sydney NSW
Departure Time:
Destination: Melbourne Vic.

Approved for Release: Thursday, August 26, 1999

The foreign registered Boeing 747 was arriving at Melbourne in weather conditions of low cloud that required an instrument landing system (ILS) approach. Air traffic control had issued radar vectors to the crew that required a pilot interpreted intercept of the runway 16 localiser.

As the aircraft approached the localiser, the crew received "off " flag indications on both ILS receivers. Air traffic control reported to the crew that the aircraft had flown through the localiser and issued further instructions for them to re-intercept the localiser from the right.

The crew was then instructed to transfer to the aerodrome controller but did not acknowledge the transfer. They left the approach control frequency but did not initially transmit on the tower frequency due to the workload in the cockpit. The aircraft was again observed to pass through the localiser and the approach controller decided to issue go-around instructions. However, there was no response from the crew to his transmissions. He informed the aerodrome controller that the crew were not on his frequency and asked that the instruction be repeated on the tower frequency. The aerodrome controller replied that the crew had not reported on his frequency, but he did not initially broadcast any instructions. A few seconds later, after further coordination with the approach controller, the aerodrome controller issued the go-around instructions but the crew had already commenced a missed approach.

The crew had received a traffic alert and collision avoidance system (TCAS) ground proximity warning of 1,000 ft above ground level and, as they were not established on the localiser and not visual with the runway, they commenced the missed approach. They broadcast on the tower frequency that they were in the go-around and radar vectors were given for a second ILS approach to runway 16.

While being radar vectored, the crew re-tuned the ILS receivers and had no repetition of the intermittent signals during the second approach.

After commencing the missed approach, the crew used the term "radio problems" to describe the intermittent localiser signal. This was interpreted by air traffic control to mean radio communication problems; an interpretation supported by the lack of two-way radio communications at the time that the approach controller wanted to commence go-around procedures. Although not directly contributing to the occurrence, this difference in interpretation between Australian and American terminology did cause confusion as to the reasons for the track diversions.