

**Aviation Safety Investigation Report
199601975**

**Boeing Co
B747**

22 June 1996

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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.

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: 199601975 **Occurrence Type:** Incident
Location: 35km SSE Cairns, Aerodrome
State: QLD **Inv Category:** 4
Date: Saturday 22 June 1996
Time: 1120 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Boeing Co
Manufacturer:
Aircraft Model: 747
Aircraft Registration: JA8141

**Serial
Number:**

Type of Operation: Air Transport High Capacity International Passenger
Scheduled
Damage to Aircraft: Nil
Departure Point: Brisbane QLD
Departure Time: 0942 EST
Destination: Cairns QLD

Approved for Release: Friday, January 10, 1997

A foreign registered Boeing 747 was proceeding from Brisbane Qld, to Cairns Qld, via airway H106. The flight was being conducted as a check flight. As the aircraft was being processed for arrival, the crew were cleared to descend to 6,500 ft, which the crew confirmed in their first contact with Cairns Approach. The aircraft's progress was being monitored by Air Traffic Control (ATC) on radar.

ATC instructed the aircraft to expect a left circuit for runway 15 with further descent in 14 track miles. The crew read back "...14 track miles". Shortly after, the controller observed the aircraft's Mode C SSR readout indicating 5,300 ft at 19 NM from Cairns. The radar lowest safe altitude in this sector was 4,400 ft. The crew were instructed to maintain 5,500 ft. Subsequently, the crew reported that the aircraft was clear of cloud and that they had sight of the surrounding terrain.

ATC processed the aircraft via a left circuit for runway 15 at Cairns without further incident.

During the investigation the crew reported that they understood the ATC instruction "further descent in 14 track miles" to mean that they were cleared to descend to 4,500 ft at 14 DME Cairns on a DME arrival. The crew also stated that ATC "was a little bit difficult to understand". Regardless of this perceived difficulty, the crew did not seek confirmation of the ATC instruction.

The recording of the communication between ATC and the aircraft confirmed that prior to this incident no further descent instructions were passed to the aircraft.

SIGNIFICANT FACTORS.

1. The crew misunderstood the ATC instruction "further descent in 14 track miles".
2. The crew did not question the ATC instruction before descending below the last assigned level.

