

**Aviation Safety Investigation Report
199701428**

**Boeing Co
B747
Piper Aircraft Corp
Navajo**

03 May 1997

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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: 199701428 **Occurrence Type:** Incident
Location: 15km SW Sydney, Aerodrome
State: NSW **Inv Category:** 4
Date: Saturday 03 May 1997
Time: 1557 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Manufacturer: Piper Aircraft Corp
Aircraft Model: PA-31-325
Aircraft Registration: VH-OYO **Serial Number:** 31-7612053
Type of Operation: Non-commercial Business
Damage to Aircraft: Nil
Departure Point: Bankstown NSW
Departure Time:
Destination: Moorabin Vic

Crew Details:

Role	Class of Licence	Hours on	
		Type	Hours Total
Pilot-In-Command	Commercial	250.0	9900

Aircraft Manufacturer: Boeing Co
Aircraft Model: 747
Aircraft Registration: 9VSFC **Serial Number:**
Type of Operation: Air Transport High Capacity International
Damage to Aircraft: Nil
Departure Point: Singapore
Departure Time:
Destination: Sydney NSW

Approved for Release: Tuesday, June 3, 1997

A Piper Chieftain (PA31) departed Bankstown on a flight to Moorabbin in accordance with the Instrument Flight Rules. The Sydney Departures controller issued the pilot with radar vectors to intercept the Sydney-Cordo track, together with an instruction to climb to and maintain 5,000 ft. At about that time a Boeing 747 (B747) was approaching Sydney from the west, in instrument meteorological conditions, following a RIVET Standard Terminal Arrival Route. The crew had been issued with a clearance to descend to and maintain 6,000 ft. The flight paths of the two aircraft were to cross each other at approximately right angles, some 8 NM to the south-west of Sydney.

The crew of the B747 subsequently advised the Sydney Approach controller that they had received a Traffic Collision and Avoidance System Resolution Advisory (TCAS RA). The RA instruction to climb the aircraft had been followed by the crew and the aircraft reached a maximum altitude of 6,300 ft before returning to the assigned level. At that time the controller observed the radar return of the PA31 descending through 5,300 ft and queried the pilot as to his present level. The pilot replied that he was returning to 5,000 ft. Neither crew sighted the other aircraft.

Analysis of recorded radar data revealed there had been a breakdown in separation between the two aircraft. The minimum vertical separation between the B747 and the PA31 was 600 ft whilst the lateral separation was 1.7 NM. The required separation standards were 1,000 ft vertically or 3 NM laterally. The PA31 reached a maximum altitude of about 5,400 ft. The pilot of the PA31 later reported he had been distracted at the time his aircraft was approaching 5,000 ft and had subsequently climbed through his assigned level.

