

**Aviation Safety Investigation Report
199600029**

**Piper Aircraft Corp
Warrior
Boeing Co
B737**

02 January 1996

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

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.

Occurrence Number: 199600029 **Occurrence Type:** Incident
Location: 1km WSW Fentons Hill, VOR
State: VIC **Inv Category:** 4
Date: Tuesday 02 January 1996
Time: 1751 hours **Time Zone** ESuT
Highest Injury Level: None

Aircraft Boeing Co
Manufacturer:
Aircraft Model: 737-377
Aircraft Registration: VH-CZI **Serial Number:** 23661

Type of Operation: Air Transport Domestic High Capacity Passenger
Scheduled
Damage to Aircraft: Nil
Departure Point: Melbourne VIC
Departure Time: 1747 ESuT
Destination: Brisbane QLD

Aircraft Manufacturer: Piper Aircraft Corp
Aircraft Model: PA-28-161
Aircraft Registration: VH-CGY **Serial Number:** 287816396
Type of Operation: Commercial Other
Damage to Aircraft: Nil
Departure Point: Moorabbin VIC
Departure Time: 1734 ESuT
Destination: Tocumwall

Approved for Release: Wednesday, March 20, 1996

The PA-28 had departed Moorabbin at 1734 ESuT and was on climb to 9,000 ft tracking via Melbourne, Fentons Hill and Mangalore to Tocumwal. The pilot had initially been in Instrument Meteorological Conditions but broke out of cloud just prior to passing over Fentons Hill.

The B737 had departed Melbourne for Brisbane at 1747 ESuT and was tracking via a Runway 27 DOSEL 3 standard instrument departure (SID). The crew requested, and were given, a climb at 300 kts in lieu of the compulsory 250 kts below 10,000 ft, and the aircraft passed close to Fentons Hill while tracking on the SID. The crew reported that they were in cloud initially and broke out just past Fentons Hill.



The air traffic controller had both aircraft on his frequency and attempted to coordinate a shortened track for the PA-28. This request was denied due to the volume of traffic. Consequently, the controller had to radar monitor the climb of three previously departed aircraft past the PA-28. Track shortening on this particular route is normally available. Additionally, the controller had two aircraft arriving from Adelaide which required a combination of radar vectoring and vertical separation to ensure their safe and timely arrival. The arrival track from the west crosses over the departure track from runway 27.

The traffic volume and complexity required significant concentration by the controller who did not notice that the B737 and the PA-28 were on converging tracks. Radar analysis indicates that the two aircraft came within 1.3 NM whilst at the same altitude with the B737 passing in front of the PA-28.

Neither crew saw the other aircraft and were not aware of the conflict.

There was a breakdown of separation standards.

Findings

1. The crews of both aircraft were operating in accordance with air traffic control instructions.
2. The traffic volume and complexity were such as to result in a high workload situation.
3. The air traffic controller did not notice that the two aircraft were converging into conflict.
4. The two aircraft came within 1.3 NM with no vertical separation.

Safety Action

Airservices Australia have initiated changes to the Melbourne terminal area airspace that will remove the area of conflict involving the inbound tracks from the west. These changes will come into effect on 20 June 1996 and will significantly reduce the workload on approach/departures control.

