

**Aviation Safety Investigation Report
198302307**

Piper PA31 Navajo

23 February 1988

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 CEO 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 CEO 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: 198302307
Location: Essendon VIC
Date: 23 February 1988
Highest Injury Level: Minor
Injuries:

Occurrence Type: Accident

Time: 0750 ESuT

	Fatal	Serious	Minor	None
Crew	0	0	0	0
Ground	0	0	0	-
Passenger	0	0	1	0
Total	0	0	2	0

Aircraft Details: Piper PA31 Navajo
Registration: VH-RTO
Serial Number: 31-147
Operation Type: Charter (Carriage of freight)
Damage Level: Nil
Departure Point: Hobart TAS
Departure Time: 0553 ESuT
Destination: Melbourne VIC

Approved for Release: 15 March 1988

Circumstances:

The pilot was conducting the final stage of a night freight flight from Melbourne to Hobart and return. Because of traffic in the Melbourne/Essendon area, the aircraft was radar vectored to the south of Essendon. In the vicinity of the Westgate Bridge the pilot was instructed to carry out two orbits, in order to facilitate his approach to Melbourne. These orbits were conducted with the aircraft in cloud. The pilot was then instructed to take up a north-westerly heading, and to descend to 2000 feet (above mean sea level). On gaining visual contact with the ground, the pilot saw an aerodrome ahead, which he assumed was Melbourne. The aircraft was too high for a direct approach to this aerodrome, and the pilot requested approval to carry out a further orbit. The aircraft was advised to take up a westerly heading, and the pilot was instructed to call the Melbourne Tower controller. The Tower controller at Essendon was aware that the aircraft was enroute to Melbourne. After he observed the aircraft passing abeam Essendon, he cleared a waiting aircraft to take-off into the south. Shortly afterwards, he saw the first aircraft commence a descending turn to the left and track towards Essendon. The controller alerted the Melbourne Tower controller to the situation, and instructed the aircraft which had just become airborne to turn to the left. The pilot of this aircraft saw the approaching aircraft, and adjusted his flight path accordingly. The two aircraft passed with about 200 feet of vertical separation, and were some 200 metres apart horizontally. Melbourne Tower advised the inbound pilot he was tracking for the wrong aerodrome, and instructed him to carry out a go around. At this time the pilot realised his error, and the remainder of the flight was uneventful. It was determined that the pilot had become disorientated as he gained visual contact with the ground. When he sighted an aerodrome, he had a fixation that it was Melbourne, and he had disregarded visual and aural cues that he was proceeding to the wrong aerodrome. He was not familiar with the area, and it is highly likely that he was suffering the effects of fatigue.

Significant Factors:

The following factors are considered to have contributed to the development of this incident

1. The pilot was not familiar with the Melbourne area.
2. The pilot did not adequately monitor the radio navigation aids in the aircraft.
3. The pilot became visually disorientated, and fixated (probably as a result of fatigue) on the wrong aerodrome.

Reccomendations:

The problems of mis-identification of Melbourne and Essendon Airports are due in part to their relative similarity. Most of the incidents which have occurred involve aircraft landing into the north at the respective aerodromes. It is considered that there is a need to provide positive visual guidance to aid in the differentiation of one aerodrome from the other. It is therefore recommended that the Department of Transport and Communications investigate the possibility of installing high-intensity sequenced lead-in lights to runway 34 at Melbourne Airport.