

**Aviation Safety Investigation Report
199801353**

**Piper Aircraft Corp
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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.

FACTUAL INFORMATION

Inbound to Launceston from Cape Barren, the pilot of a PA-23, VH-JSB, requested a 32L VOR/DME approach. Because of conflicting traffic, air traffic services (ATS) instructed JSB to enter the holding pattern, to maintain 7,000 ft, and report turning inbound in the holding pattern. The pilot acknowledged the instruction, but proceeded immediately into the 32L VOR/DME approach, descending from 7,000 ft. He reported turning inbound, but ATS believed the 'Inbound' call referred to JSB being inbound in the holding pattern. The pilot continued to fly the published 32L VOR/DME pattern and positioned the aircraft to intercept the 319 degrees radial as prescribed on the DAP chart. Minimum altitude specified before being established on the 319 degree radial is 2,800 ft.

Meanwhile, VH-OZV, a PA-31, was in cloud at 3,000 ft, conducting an ILS approach to runway 32L at Launceston. A company pilot occupied the right seat on the flight from Flinders Island. When passing the NILE locator, 7.7 NM DME distance, at 3,000 ft, the aircraft entered a cloud break and the right seat pilot sighted another aircraft about 200m ahead. The flying pilot took immediate action to avoid the other aircraft which was subsequently identified as JSB. JSB continued the 32L VOR/DME approach, and ATS provided OZV with separation.

ANALYSIS

The final approach paths for the runway 32L ILS and runway 32L VOR/DME are slightly different, with the ILS approach requiring the 313 degrees inbound radial to be flown, and the VOR/DME specifying the 319 degrees radial. The inbound turn in the VOR/DME pattern is a right turn to intercept the 319 degrees radial, and this requires the aircraft to fly across the inbound ILS approach track. An aircraft flying a VOR/DME approach would normally be inbound by 8NM, which is almost adjacent to the NILE locator, which aircraft utilise on an ILS approach.

Altitude requirements in the two approaches are also similar. At a distance of 7.7 NM DME, the distance of the NILE locator, an aircraft on an ILS approach would be descending from 3,000 ft, and an aircraft on a VOR/DME should be at about 2,900 ft.

Although aircraft may be carrying out different approaches to runway 32L, they need to be treated as if they are flying the same approach, and ATS apply separation standards accordingly. If a pilot misunderstands an ATS instruction, potential exists for two aircraft to be in close proximity.

The pilot of JSB misunderstood the ATS instruction to report inbound in the holding pattern, to mean to report inbound in the VOR/DME approach. Because of this misunderstanding, he commenced the approach and descended below 7,000 ft without a clearance. This action placed JSB in conflict with OZV which had been cleared to carry out an ILS approach to runway 32L. The 'Inbound' call to ATS did not provide a warning of the developing situation, as ATS were expecting the call in the holding pattern.

ATS had advised the pilot of JSB that the instruction to enter the holding pattern was because of other traffic in the area, including some making instrument approaches. Although adequate information was transmitted by ATS, the pilot's decision to descend from 7,000 ft and carry out the VOR/DME approach he originally requested, indicated a loss of situational awareness.

Further investigation showed that four minutes before the breakdown of separation between JSB and OZV, VH-IAM, a PA31, had departed from Launceston for Flinders Island. IAM was held at 6,000 ft to maintain separation from JSB which was thought to have been at 7,000 ft. However, when IAM departed, JSB had descended from 7,000 ft. With JSB descending to the south east of the VOR and IAM climbing to the north east, there was probably no breakdown of separation, but there was no separation assurance.

SIGNIFICANT FACTORS

1. JSB descended from 7,000 ft and commenced a 32L VOR/DME approach without a clearance.
2. In a cloud break, the right seat pilot of OZV sighted JSB.
3. The flying pilot in OZV took action to avoid JSB.

