

**Aviation Safety Investigation Report
199501313**

**Beech Aircraft Corp
Baron**

01 May 1995

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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: 199501313 **Occurrence Type:** Incident
Location: Hobart
State: TAS **Inv Category:** 4
Date: Monday 01 May 1995
Time: 1812 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Manufacturer: Beech Aircraft Corp
Aircraft Model: 58
Aircraft Registration: VH-LAP **Serial Number:** TH-646
Type of Operation: Charter Unknown
Damage to Aircraft: Nil
Departure Point: Queenstown TAS
Departure Time:
Destination: Hobart TAS

Crew Details:

Role	Class of Licence	Hours on Type	Hours Total
Pilot-In-Command	Commercial	65.0	400

Approved for Release: Tuesday, May 16, 1995

VH-LAP was cleared to track to Tea Tree(TTR) at 7000 feet. Approaching TTR, the aircraft was instructed to enter the holding pattern and shortly afterwards was cleared to descend to 4000 feet and to make an ILS approach for runway 12. Three minutes later, at 1812 hours, the pilot reported an ADF failure and asked for a climb. He was cleared to 5500 feet. He was then cleared to track outbound between the 301 and the 310 radials, and to turn inbound as required to establish the aircraft on the localiser at approximately 20 DME. He could then expect an ILS approach.

Over an extended period the pilot tried to establish himself on the localiser, with assistance from the pilots of two other aircraft holding above, both of whom had VH-LAP in sight from time to time. Eventually another ILS was commenced but this was abandoned because the aircraft was too high (4500 feet at five miles from the aerodrome on final approach).

At the suggestion of the tower controller and with controller assistance a runway 30 VOR/DME was then successfully completed and the aircraft landed at 1859.

The pilot was using a GPS to establish distances, as he could not obtain distance readings from the international DME. Use of the GPS as a primary navigation aid was not permitted. The pilot had selected the Hobart ILS frequency on both the NAV selector and the international DME selector. The pilot thought the international DME selector was a second NAV selector. The number two NAV indicator, which the pilot thought was for a second NAV receiver, was in fact driven by the GPS. Hence the tracking indications on the two NAV indicators were different. Because of the pilot's misunderstanding over the purpose of the second indicator, the indication differences created confusion in his mind.

The ADF equipment was later established to have been operating normally and the reason for the pilot reporting it had failed was not determined.

Another company pilot was holding at TTR and attempted to pass advice to the pilot of VH-LAP. Recorded communications of the occurrence showed that the stream of instructions was considerable and may have contributed to overloading the pilot of VH-LAP.

Significant Factors

The following factors were considered relevant to the development of the incident:

1. The pilot was not adequately familiar with the navigation equipment fitted to the aircraft and hence became confused over the indications obtained.
2. The pilot had a low skill level in regard to orientating the aircraft to proceed on the localiser track.

