

**Aviation Safety Investigation Report
199000585**

Beech V35

03 May 1990

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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.

Occurrence Number: 199000585
Location: Alice Springs NT
Date: 03 May 1990
Highest Injury Level: Nil
Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	2
Total	0	0	0	3

Aircraft Details: Beech V35
Registration: N8849A
Serial Number: N/K
Operation Type: Private
Damage Level: Substantial
Departure Point: Yulara NT
Departure Time: 0800
Destination: Alice Springs NT

Approved for Release: 6th August 1990

Circumstances:

The aircraft had been refueled to full tanks the night before and a thorough fuel drain check was completed as part of the preflight inspection. No water or impurities were detected. On the day of the accident, the aircraft completed a short local flight of some 25 minutes before departing for its destination. The right tank was used for most of the local flight so the pilot changed to the nearly full left tank some minutes before joining the circuit. The engine failed immediately after the pilot commenced to turn onto base leg. The fuel selector remained on the left tank and the engine caught several times by use of the wobble pump but did not continue to run. During the trouble checks, the pilot switched on the left tip tank pump but this did not help as the pump transfers fuel only to the left main tank. By this stage, the pilot was committed to a forced landing and landed the aircraft about three kilometers short of the threshold. After touchdown, the aircraft crossed a road and passed through a fence before coming to rest on open ground with the nosegear collapsed. An extensive investigation, failed to find a cause for the engine failure. However, the investigation revealed that the pilot did not operate the wobble pump vigorously enough to produce a fuel flow. Operation of the wobble pump more vigorously during the technical investigation, produced a suitable fuel flow from all selected tank positions. The front seat passenger, who was also a commercial pilot, confirmed correct in flight tank selections.

Significant Factors:

The following factors were considered relevant to the development of the accident

1. Engine failure for undetermined reason but probably fuel starvation.
2. Pilot was unable to restore power by use of the wobble pump.

3. Inadequate fuel system knowledge.