

**Aviation Safety Investigation Report
199403835**

**de Havilland Canada
Beaver**

19 December 1994

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: 199403835 **Occurrence Type:** Accident
Location: 60km NW Taree (Cooplacurripa Station)
State: NSW **Inv Category:** 3
Date: Monday 19 December 1994
Time: 1940 hours **Time Zone:** ESuT
Highest Injury Level: Fatal
Injuries:

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

Aircraft Manufacturer: de Havilland Canada
Aircraft Model: DHC-2
Aircraft Registration: VH-BSC **Serial Number:** 1617
Type of Operation: Commercial Aerial Agriculture - Other
Damage to Aircraft: Destroyed
Departure Point: Cooplacurripa NSW
Departure Time: 1938 ESuT
Destination: Cooplacurripa NSW

Crew Details:

Role	Class of Licence	Hours on Type	Hours Total
Pilot-In-Command	Commercial	350.0	800

Approved for Release: Friday, May 19, 1995

The aircraft was operating from an agricultural airstrip 600 ft above mean sea level, spreading superphosphate over moderately steep undulating terrain. The duration of each flight was 6-7 minutes. The accident flight was the seventh and probably intended to be the last for the day.

A witness, who was situated under the flight path, reported that the aircraft was tracking east-north-east in what appeared to be normal flight. Her attention was distracted for a few moments and when she next saw the aircraft it was in a near vertical dive with the upper surface of the wings facing her. The aircraft then struck the hillside and burst into flames.

Examination of the wreckage did not reveal any pre-existing defect which may have contributed to the accident. Impact marks on the propeller indicated that the engine was operating at impact.

The superphosphate load remained in the hopper and the emergency dump system actuating lever was in the closed position. Inspection indicated that the dump system was serviceable prior to impact.

Calculations indicated that at the time of the accident the aircraft, although heavily loaded, was operating within the flight manual maximum weight limitation.

A light north-easterly wind was observed at the airstrip. However, at the accident site, which was about 250 ft higher, the wind was a moderate west-north-westerly. Sky conditions were clear with a visibility of 30 km.

The aircraft probably experienced windshear and turbulence as it encountered a quartering tailwind approaching the ridgeline. The result would have been a reduction in climb performance and it is likely that the pilot attempted to turn the aircraft away from the rising terrain. During the turn it appears that the aircraft stalled and that the pilot was unable to regain control before it struck the ground.

The reason the pilot did not dump the load when the climb performance was reduced could not be determined.

Significant factors:

The following factors were determined to have contributed to the accident.

1. Shifting wind conditions conducive to windshear and turbulence were present in the area.
2. The aircraft was climbing at near to maximum allowable weight.
3. Control of the aircraft was lost with insufficient height available to effect a recovery.