

**Aviation Safety Investigation Report
198802387**

Cessna 188B-A1

20 July 1988

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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.

This accident was not subject to an on scene investigation.

Occurrence Number: 198802387 **Occurrence Type:** Accident
Location: Gorian 36 km NW Burren Junction NSW
Date: 20 July 1988 **Time:** 1430
Highest Injury Level: Nil
Injuries:

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

Aircraft Details: Cessna 188B-A1
Registration: VH-UDN
Serial Number: 18803151T
Operation Type: Aerial Work
Damage Level: Substantial
Departure Point: Gorian NSW
Departure Time: 1415
Destination: Gorian NSW

Approved for Release: November 10th 1988

Circumstances:

The pilot was conducting agricultural spraying operations on a paddock which had a powerline crossing it at an angle and a fence along the western boundary. On completion of a spray run to the north, the pilot returned for a run to the south along the fence line. The marker was required to climb over the fence into the next paddock and move away from the flight path of the aircraft, prior to the commencement of the run along the fence. As he approached the powerline, with the right wing almost over the fence, the pilot noticed that the marker had delayed climbing over the fence. He took evasive action to avoid striking the marker and during this attempt the aircraft contacted the powerline. The aircraft deflector cable failed, allowing the power line to sever the rudder from the aircraft. The pilot carried out a precautionary landing on a road. During the landing roll, the left brake failed and the aircraft ground looped. The investigation revealed that the pilot misjudged the clearance between the aircraft and the powerline. The deflector cable was severed by the impact with the powerline and the rudder was torn from the aircraft. The left main landing gear leg was found to have failed from a combination of bending and twisting. It is considered likely that the brake failure occurred as the leg and attached brake line were torn from the aircraft, depriving the pilot of directional control. There were no pre-existing defects with the aircraft which could have contributed to the accident.

Significant Factors:

It was considered that the following factors were relevant to the development of the accident

1. The marker delayed moving clear of the aircraft flight path.
2. The pilot reacted spontaneously as a result of a recent similar occurrence.

3. The pilot misjudged the clearance of the aircraft from the powerline when taking avoiding action.
4. The deflector cable failed as a result of the impact with the powerline.
5. The rudder was torn from the aircraft by the powerline.
6. The left main landing gear leg failed during the landing roll.
7. The left brake failed as a result of the landing gear leg and brake lines being torn from the aircraft.
8. The pilot was unable to maintain directional control during the landing roll.