

**Aviation Safety Investigation Report
199003114**

Cessna 182-Q

28 November 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: 199003114
Location: 30 km East of Mainoru NT
Date: 28 November 1990
Highest Injury Level: Nil
Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	4
Total	0	0	0	5

Aircraft Details: Cessna 182-Q
Registration: VH-UMR
Serial Number: 18265822
Operation Type: Regular Public Transport
Damage Level: Substantial
Departure Point: Bulman NT
Departure Time: N/A
Destination: Urapunga NT

Approved for Release: 11th June 1991

Circumstances:

The pilot stated that while in the cruise at 3500 feet, approximately ten minutes after take off, the engine began to lose power and run roughly. Remembering that he had flown over a cleared area a short time before, the pilot elected to attempt to return to this clearing. During the descent he noticed that even with the throttle closed a rough vibration was being transmitted through the airframe. A decision was then taken to make a power-off landing. Approximately ten metres into the landing roll the right main wheel assembly separated from the strut when it impacted a small gully. The aircraft then came to halt without further incident. The investigation revealed that the piston assembly in the number five cylinder had failed due to prolonged and severe detonation. The exact cause of the detonation was not determined.

Significant Factors:

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

1. The number five piston assembly failed due to severe and prolonged detonation.
2. The aircraft was forced to land in unsuitable terrain.