

**Aviation Safety Investigation Report
199000022**

Piper PA23-250 T

23 October 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: 199000022
Location: Oenpelli NT
Date: 23 October 1990
Highest Injury Level: Nil
Injuries:

Occurrence Type: Accident

Time: 1340

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	3
Total	0	0	0	4

Aircraft Details: Piper PA23-250 T
Registration: VH-ICY
Serial Number: 27-7754042
Operation Type: Charter
Damage Level: Substantial
Departure Point: Oenpelli NT
Departure Time: 1330
Destination: Nabarlek NT

Approved for Release: 11th June 1991

Circumstances:

The flight consisted of one aircraft in a group of three positioning a mobile polling booth. After the passengers were unloaded at Oenpelli, the aircraft flew to Jabiru to refuel and the pilot rested in the air conditioned snack bar for about five hours. The aircraft was then re-positioned at Oenpelli and the passengers boarded. The aircraft departed from runway 12 as the wind was 120 degrees at 20 knots, gusting to 25 knots. The temperature was about 40 degrees Celsius. This was not the pilot's preferred runway as the Spencer Range escarpment commences within five miles of the DEPARTURE end of this runway, rising rapidly from sea level, through 500 feet to over 1,000 feet. At some point after take-off, the pilot realised the left engine manifold pressure was steadily decreasing. After completing trouble checks, he feathered the left propeller and turned back towards the aerodrome. When turning onto the base leg, the pilot realised the aircraft would not maintain altitude and could not reach the runway. He then elected to land straight ahead on a dry clay pan. The landing gear could not be extended as the left engine drives the hydraulic pump and insufficient time remained for the pilot to manually extend the gear. The aircraft touched down wings level and skidded for about 135 metres. All four occupants evacuated safely once the aircraft stopped. The investigation failed to determine any pre-existing defect in the left engine. However, impact damage to the undersurface of the engine, may have destroyed any evidence of a pre-existing defect.

Significant Factors:

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

1. For undetermined reasons, the left engine suffered a partial or total power failure.
2. The aircraft was unable to maintain height on one engine in the high density altitude conditions.