

**Aviation Safety Investigation Report  
198803497**

**Piper PA28-161**

**15 November 1988**

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 CEO 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 CEO 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](http://www.atsb.gov.au).**

**Occurrence Number:** 198803497  
**Location:** 15 km NW of Mt Surprise QLD  
**Date:** 15 November 1988  
**Highest Injury Level:** Nil  
**Injuries:**

**Occurrence Type:** Accident  
**Time:** 1115

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>

**Aircraft Details:** Piper PA28-161  
**Registration:** VH-PZH  
**Serial Number:** 28-7716315  
**Operation Type:** Private  
**Damage Level:** Substantial  
**Departure Point:** Cairns QLD  
**Departure Time:** 1006  
**Destination:** Western Creek Station QLD

**Approved for Release:** March 6th 1989

#### **Circumstances:**

The flight proceeded normally after departure until about 1114 hours when the pilot noticed a decrease in engine RPM from 2500 to 2300. He opened the throttle but the RPM continued to decrease. As he was unable to restore power to the engine he turned the aircraft towards an open area, that had been overflowed a couple of minutes earlier, and set the aircraft up in a glide. The area chosen was the only suitable area available for a landing. The pilot positioned the aircraft to join the downwind leg of the circuit and transmitted a "Mayday" call. As the aircraft was turned onto final approach the pilot spotted a six metre high tree near the intended touchdown point and manoeuvred the aircraft to avoid the tree. At this stage the flaps were selected fully down and the indicated airspeed was 75 knots. The aircraft subsequently floated for a considerable distance before touching down 453 metres after the first available touchdown point. The distance remaining to a fence at the end of the landing area was 309 metres. During the landing roll the right wingtip struck a small tree, as the pilot was attempting to manoeuvre the aircraft clear of an obstruction, and the aircraft was turned to the right. The right wing then struck a second tree which resulted in it being torn from the aircraft and the travel of the aircraft was halted. An inspection of the wreckage found that there had been an internal failure of one muffler which resulted in two of the four engine exhaust outlets being completely blocked.

#### **Significant Factors:**

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

1. The internal baffles in the forward muffler had corroded/disintegrated completely blocking off the exhaust outlets from that muffler. This resulted in a considerable loss of engine power.

2. The pilot misjudged the aircraft speed and altitude during the approach and overshot the intended touchdown point.
3. The pilot misjudged the clearance of the wingtip from a tree during the landing roll.

**Reccomendations:**

It is recommended that the Civil Aviation Authority issue a directive that requires the internal inspection of mufflers of the type fitted to this aircraft and similar types in which internal failure has the capacity to block exhaust outlets.