

**Aviation Safety Investigation Report
198702394**

Piper PA32

14 March 1987

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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: 198702394 **Occurrence Type:** Accident
Location: 3 km South of Coots Crossing, near Grafton NSW
Date: 14 March 1987 **Time:** 1220
Highest Injury Level: Nil
Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	2
Total	0	0	0	3

Aircraft Details: Piper PA32
Registration: VH-PWD
Serial Number:
Operation Type: Private (Pleasure)
Damage Level: Substantial
Departure Point: Coffs Harbour NSW
Departure Time: 1220
Destination: Boggabilla NSW

Approved for Release: December 17th 1987

Circumstances:

The aircraft had not been flown and had stood in the open for about two months. Some 20 minutes after DEPARTURE the engine commenced to run roughly, and the pilot elected to divert to the nearest suitable aerodrome. Shortly afterwards, the engine backfired severely and black smoke entered the cabin through an air vent. The engine subsequently stopped completely and the pilot was committed to a forced landing on unsuitable terrain. The gear collapsed and the aircraft collided with two fences before coming to rest. On vacating the aircraft, the pilot discovered that a fire was burning under the cowls on the right side of the engine. The fire was extinguished by the pilot and passengers. The cause of the engine failure could not be determined. However, the insulation of both magneto coils was badly deteriorated. It is considered likely that during the period that the aircraft was inactive, moisture accumulated in the magnetoes. This moisture, together with the deteriorated insulation, probably caused the magneto to misfire and fail. The fire developed in the engine bay after severe backfiring caused the exhaust cluster on the right hand side of the engine to separate from the muffler. The hot exhaust gases then ignited the fibreglass cowling and the melting resin emitted the black smoke which entered the cabin via the hot air vent.