

**Aviation Safety Investigation Report  
198901532**

**Cessna 172M**

**29 January 1989**

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

**Occurrence Number:** 198901532  
**Location:** Moorooduc VIC  
**Date:** 29 January 1989  
**Highest Injury Level:** Nil  
**Injuries:**

**Occurrence Type:** Accident

**Time:** 1520 Approx.

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	3
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Aircraft Details:** Cessna 172M  
**Registration:** VH-MOU  
**Serial Number:** 17264583  
**Operation Type:** Private  
**Damage Level:** Substantial  
**Departure Point:** Moorooduc VIC  
**Departure Time:** N/A  
**Destination:** Moorooduc VIC

**Approved for Release:** March 16th 1989

#### **Circumstances:**

The pilot hired the aircraft to make a short local pleasure flight with some friends on board. The aircraft was parked at the southern end of the airfield, pointing north and aligned with the centre of the 1300 metre grass strip. The pilot reported that he started the engine and completed normal engine runup and pre-takeoff checks. He then manoeuvred the aircraft out of the parking position to check for other aircraft on final approach. A takeoff into the north was then commenced. After what the pilot considered was a normal ground roll, the aircraft became airborne. He initially allowed it to accelerate close to the ground before commencing to climb. At an altitude of about 100 feet above the ground and an airspeed of about 60 knots, the engine began to run very roughly. The pilot landed the aircraft back on the strip and commenced braking. He then became aware that the aircraft was not going to stop before the fence at the northern end of the strip. Accordingly, he applied power in an attempt to fly over the fence. This attempt was not successful. The aircraft hit the top wires of the fence and an adjacent gorse hedge, coming to rest 50 metres further on with the nose gear detached. An examination of the engine revealed a number of faulty spark plugs. An opinion was obtained from an engine specialist that the condition of the plugs was consistent with the rough running reported by the pilot. Weather conditions had not been conducive to the formation of carburettor icing.

#### **Significant Factors:**

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

1. Shortly after takeoff the engine began to run roughly.
2. The aircraft was landed back on the strip but there was insufficient strip remaining to stop it before a fence at the northern end.

3. The condition of the engine spark plugs was consistent with the rough running reported by the pilot.

**Reccomendations:**

Although it could not be proved, it is a possibility that this aircraft took-off before the engine was within its normal operating temperature limits. In addition, there is no doubt that the pilot took-off in a tailwind and on this occasion that action was a factor in the accident. It is recommended that the Civil Aviation Authority give this accident publicity in the Aviation Safety Digest with particular emphasis on these points.