## **Aviation Safety Investigation Report 198502509**

Cessna 172K

11 January 1985

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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: 198502509 Occurrence Type: Accident

**Location:** 3 km ESE Mittagong NSW

**Date:** 11 January 1985 **Time:** 1132 (approx)

**Highest Injury Level:** Minor

**Injuries:** 

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

**Aircraft Details:** Cessna 172K **Registration:** VH-RGT

**Serial Number:** 

Operation Type: Pleasure flight
Damage Level: Destroyed
Departure Point: Mittagong NSW
Departure Time: 1132 (approx)

**Destination:** Coffs Harbour NSW

**Approved for Release:** 5th November, 1985

## **Circumstances:**

The pilot reported that the aircraft became airborne after a ground roll of about 700 metres and initial climb was commenced at an indicated airspeed of 65 knots. Soon after lift off a lack of climb performance became noticeable and the airspeed reduced to 50 knots. Several gradual turns were made to avoid trees but the aircraft struck trees on rising terrain and impacted the ground. Examination of the engine revealed that the two front cylinders had been running over-rich. An incorrect model carburettor was found to have been fitted to the engine. However, it could not be determined if this had been the cause of the of the fuel mixture problem. Local aero club pilots reported that, in this aircraft, with the mixture control in the full rich position, the engine obtained about 200 RPM less than the optimum. It was well known to club pilots that the mixture control required leaning out by about three centimetres before take-off to achieve the correct engine performance. On the day of the accident, the pilot leaned the mixture slightly less than one centrimetre. It is likely that the loss of aircraft performance was the result of reduced engine performance caused by an over-rich mixture.