

**Aviation Safety Investigation Report
198802401**

Cessna 172-M

25 October 1988

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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: 198802401
Location: 2 km NW of Parramatta NSW
Date: 25 October 1988
Highest Injury Level: Minor
Injuries:

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

Occurrence Type: Accident
Time: 1020

Aircraft Details: Cessna 172-M
Registration: VH-UGR
Serial Number: 17263949
Operation Type: Private
Damage Level: Destroyed
Departure Point: Bankstown NSW
Departure Time: 1005
Destination: Forster NSW

Approved for Release: 29 June 1989

Circumstances:

The aircraft was in normal cruise at 1500 feet above sea level when the pilot noted a mild shuddering, and almost immediately the oil pressure reading dropped to zero. Shortly afterwards, the engine began vibrating severely, and the pilot was committed to a forced landing. In the latter stages of the approach the pilot was forced to pull-up to clear powerlines, following which the aircraft descended and struck a tree and a steel mesh fence at the edge of an industrial area. Investigation revealed that the flexible oil line between the engine and oil cooler had failed due to deterioration, resulting in oil starvation and seizure of the engine. Examination of Bureau records revealed three other recent occurrences in New South Wales where the subject hoses have failed in flight. The hoses are currently required to be inspected and tested every six years. However, the manufacturer recommends that the hoses should be replaced every five years or at engine overhaul, whichever comes first. The particular hose which failed had been in service for more than six years.

Significant Factors:

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

1. Failure of a flexible oil line, resulting in complete engine failure.
2. The pilot was forced to attempt a landing on unsuitable terrain.

Reccomendations:

It is recommended that the Civil Aviation Authority considers amending the Airworthiness Directive relating to these hoses to reflect the manufacturer's recommendation i.e. that the particular hoses be replaced at engine overhaul or after five years, whichever occurs first.