

Aviation Safety Investigation Report 199001995

Piper PA60-600

3 July 1990

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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: 199001995
Location: Orange NSW
Date: 3 July 1990
Highest Injury Level: Nil
Injuries:

Occurrence Type: Accident

Time: 1813

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

Aircraft Details: Piper PA60-600
Registration: VH-AVS
Serial Number: 60-0604-7961194
Operation Type: Charter
Damage Level: Substantial
Departure Point: Parkes NSW
Departure Time: N/K
Destination: Orange NSW

Approved for Release: 10th May 1991

Circumstances:

The aircraft was being flown for a visual night circuit to runway 11 after completing an instrument approach. The wind was reported as 5 to 10 knots from the south-west. The pilot reported that after touchdown the aircraft commenced to veer to the right. Although left braking and steering was applied, the aircraft continued to veer until it lurched to the right and stopped, as though the right wheel had become bogged. After vacating the aircraft the pilot found the right main gear oleo had broken away and the aircraft was resting on the right main gear mount, which had dug into the runway surface. A metallurgical examination of the landing gear showed that the inner oleo strut tube had failed as a result of the propagation of a fatigue crack to a critical length. No manufacturing fault was detected; however, the landing gear had a high total time in service history. No other failures of this type are contained in Civil Aviation Authority records and it is considered that it may have been a "one-off" event.

Significant Factors:

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

1. The landing gear had a high total time in service.
2. Tensile failure of bronze filler in a fatigue and/or large loading environment.
3. Fatigue fracture of inner oleo strut tube.