

**Aviation Safety Investigation Report
198902565**

Piper PA-28 R201

1 July 1989

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the CEO of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the CEO of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

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: 198902565
Location: Warnervale NSW
Date: 1 July 1989
Highest Injury Level: Nil
Injuries:

Occurrence Type: Accident

Time: 1440

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

Aircraft Details: Piper PA-28 R201
Registration: VH-PRF
Serial Number: 28R-7837078
Operation Type: Aerial Work
Damage Level: Substantial
Departure Point: Warnervale NSW
Departure Time: N/A
Destination: Warnervale NSW

Approved for Release: 17th May 1990

Circumstances:

The pilot under training was practising circuits and landings in preparation for a Commercial Licence test. When the landing gear was extended on the downwind leg, the nosegear light did not illuminate. The instructor changed light bulbs and the light illuminated so the circuit was continued. The landing was normal until the nosegear collapsed during the ground roll. The aircraft was involved in a similar accident in South Australia on 25 May 1989 and had flown approximately 25 hours since being repaired. A technical investigation revealed the downlock hook had fractured across the "U" section and there was excessive wear in all attachment holes and bushes. The downlock hook failed in overload probably as a result of higher than normal loads caused by the excessive wear in the drag link/overcentre lock system.

Significant Factors:

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

1. Inadequate maintenance and repair following a previous accident.
2. Overload failure of the downlock hook in the nosegear mechanism.