

**Aviation Safety Investigation Report
198802361**

Beech D55

28 April 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: 198802361
Location: Warkworth NSW
Date: 28 April 1988
Highest Injury Level: Nil
Injuries:

Occurrence Type: Accident

Time: 735

	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: Beech D55
Registration: VH-MKE
Serial Number: TE-592
Operation Type: Charter
Damage Level: Substantial
Departure Point: Maitland NSW
Departure Time: 0725
Destination: Warkworth NSW

Approved for Release: 7 February 1989

Circumstances:

The pilot reported that he had obtained normal indications when he selected the landing gear down. The subsequent touchdown was normal but as the nosewheel was lowered to the ground, the nose gear leg collapsed. The eyebolt between the nose gear retract aft rod and the landing gear motor had failed, resulting in the nose gear failing to lock down and allowing it to retract on ground contact. The eyebolt had failed at the beginning of the thread, adjacent to the eye. Specialist examination indicated that the initial fracture was indicative of fatigue and had been present for some time. The aircraft had only recently been returned to service following an earlier accident which involved a fatigue failure of the nose gear retract rod plunger fork. It was considered likely that the fracture had initiated at the same time as the earlier failure.

Significant Factors:

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

1. Probable fatigue failure.
2. Inadequate inspection during repair following earlier accident.

Reccomendations:

It is recommended that the Civil Aviation Authority considers advising maintenance organisations of the desirability of conducting magnetic particle inspections of appropriate eyebolts, when aircraft have incurred damage to the landing gear area.