

**Aviation Safety Investigation Report
199602993**

**Hughes Helicopters
Hughes 500**

19 September 1996

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 Executive Director of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

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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.

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number: 199602993 **Occurrence Type:** Accident
Location: 35km NE Tamworth, Aerodrome
State: NSW **Inv Category:** 4
Date: Thursday 19 September 1996
Time: 1100 hours **Time Zone** EST
Highest Injury Level: Serious
Injuries:

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

Aircraft Manufacturer: Hughes Helicopters
Aircraft Model: 369D
Aircraft Registration: VH-PLL **Serial Number:** 970192D
Type of Operation: Miscellaneous Other
Damage to Aircraft: Substantial
Departure Point: Roadside South of Uralla NSW
Departure Time:
Destination: 15 Nm NE of Tamworth NSW

Crew Details:

Role	Class of Licence	Hours on Type Hours Total
Pilot-In-Command	ATPL	600.0 7350

Approved for Release: Tuesday, January 21, 1997

The helicopter was engaged in the inspection of 330KV power transmission lines.

The pilot reported that the helicopter was being hovered at a work station bonded to a conductor, whilst a linesman measured a mid span joint. The helicopter was kept at an angle of 30 degrees to the cable, partly due to the gusty wind, and also due to the rising gradient of the power lines to the rear. However, the tail of the helicopter suddenly yawed towards the conductor. Although the pilot applied full left pedal, he was unable to stop or even slow the rate of yaw before the tail rotor contacted the conductor. The pilot reduced power immediately, descending the helicopter forward and right in an effort to touch down before losing control.

A metallic screeching noise was heard, which was assumed to be caused by the tail rotor gearbox separating. At some point in the turn the nose dropped and the helicopter began to roll left. Collision with part of a tree prior to ground impact was unavoidable. The pilot subsequently shut the engine down with the fuel cutoff lever, as his left arm was injured during the impact sequence. The ELT did not activate.

