

**Aviation Safety Investigation Report
198700732**

Bell 47-G3B1

31 May 1987

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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: 198700732

Occurrence Type: Accident

Location: Mountain Valley Station NT

Date: 31 May 1987

Time: 1400

Highest Injury Level: Nil

Injuries:

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

Aircraft Details: Bell 47-G3B1

Registration:

Serial Number: 6632

Operation Type: Aerial Work (Mustering)

Damage Level: Substantial

Departure Point: Mountain Valley Station NT

Departure Time: 1400

Destination: Mountain Valley Station NT

Approved for Release: September 8th 1987

Circumstances:

The pilot was approaching the rear of a herd of cattle when he attempted to climb the aircraft. As he raised the collective control the engine RPM started to decrease. There was no suitable landing site below the helicopter so the pilot was forced to manoeuvre the aircraft around several trees to get to a suitable landing area. As he flared the aircraft for a landing the tail rotor contacted the ground and the main rotor severed the trunks of a tree and two saplings. The helicopter yawed to the left and slid sideways collapsing the left landing skid. The throttle control shaft output assembly, within the throttle control cambox had become dislodged, depriving the pilot of throttle control. The resultant freeplay within the throttle control system allowed the throttle butterfly to return to the idle position. The bearings and sleeves within the cambox are secured at manufacture by roll staking, which is considered to be the superior method for securing these components. However, the manufacturers maintenance instructions makes no mention of the method of securing the bearings and sleeves in the cambox. These components in the subject aircraft had been overhauled and were retained by the use of adhesive, which subsequently failed.