

**Aviation Safety Investigation Report
198700112**

Bell 206B

10 November 1987

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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: 198700112
Location: 78km S of Mount Magnet WA
Date: 10 November 1987
Highest Injury Level: Nil
Injuries:

Occurrence Type: Accident
Time: 1055

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	2
Total	0	0	0	3

Aircraft Details: Bell 206B
Registration: VH-AZH
Serial Number: 3075
Operation Type: Aerial Work (Mineral Survey)
Damage Level: Substantial
Departure Point: 79km S Mt Magnet WA
Departure Time: 1053
Destination: 78km S Mt Magnet WA

Approved for Release: 8 August 1988

Circumstances:

Due to a loose seat belt banging against the fuselage of the helicopter, the pilot slowed the aircraft and commenced an approach to land as soon as possible. The chosen approach path had a tailwind of between 15 and 20 knots. Shortly after commencing the approach, the rate of descent increased rapidly and the pilot's application of collective pitch to correct the situation further increased the descent rate. During the approach, both the audio and visual annunciators indicated that the engine had failed. The pilot lowered collective but then had to flare as the aircraft was about to impact a small mulga tree. The aircraft cleared that tree but was damaged as a result of a collision with a nearby tree. The rapid rate of descent experienced whilst descending downwind with a low forward speed is typical of an aircraft which has settled in its own main rotor downwash, i.e in a Vortex Ring State. No defect was found in the engine which might have explained the reported engine failure. It is possible that the pilot inadvertently selected the throttle to the engine shut-off position as he commenced autorotative flight.