Aviation Safety Investigation Report 198403572

Bell 47-J2

12 September 1984

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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: 198403572 Occurrence Type: Accident

Location: Mataranka NT

Date: 12 September 1984 **Time:** 1648

Highest Injury Level: Minor

Injuries:

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

Aircraft Details: Bell 47-J2 **Registration:** VH-THH

Serial Number:

Operation Type: Local Sightseeing Flight

Damage Level: Substantial **Departure Point:** Mataranka NT

Departure Time: 1648

Destination: Mataranka NT

Approved for Release: 18th February, 1985

Circumstances:

A ten minute flight in the local area had been completed without incident. After DEPARTURE for a second flight the helicopter was climbed to 150 feet agl to allow the passengers to view the campsite and a herd of animals. The pilot and passengers then heard a loud bang which was followed by a severe airframe vibration. The noise and vibration continued and the pilot elected to carry out an autorotational descent and land in a small clearing. The clearing was overshot and the helicopter struck several trees. Investigation indicates that the engine cooling fan drive belt, which rotates at high rpm, failed. The flailing belt then tore a section of the canvas cooling fan shroud. Vibration was produced when the broken belt and section of shroud were ingested into the cooling fan.