

**Aviation Safety Investigation Report
198900837**

Kawasaki Bell 47

29 November 1989

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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: 198900837

Occurrence Type: Accident

Location: 35 km East of Elsey Stn NT

Date: 29 November 1989

Time: 1300

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: Kawasaki Bell 47

Registration: VH-HFV

Serial Number: 2186

Operation Type: Aerial Work

Damage Level: Substantial

Departure Point: Elsey Stn NT

Departure Time: 1030

Destination: Elsey Stn NT

Approved for Release: 25th January 1990

Circumstances:

The aircraft was cruising at about 150 - 200 feet above the trees over heavy scrub country when the engine coughed. The pilot started a descent and the engine regained power briefly before stopping completely. Unable to reach a suitable area for an autorotational landing, the pilot avoided two large trees before the aircraft crashed through smaller trees and struck the ground. The aircraft had been operating for some two and one half hours since refuelling to full tanks, which usually provided an endurance of at least three hours. The pilot was in the habit of managing his fuel by reference only to the operating times and by landing to conduct a sight check of the fuel tank contents after about two and one half hours of operations. No reliance was apparently placed on the fuel contents gauge in the aircraft. An inspection of the aircraft after the accident revealed fuel stains over the oil tank, induction plate and main frame. The inspection also revealed that two screws were missing from the carburettor drain tap plate. No signs of the fuel leak were reportedly evident at the previous pre-flight inspection.

Significant Factors:

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

1. Pilot relied on the times of operation for fuel management in flight, and did not refer to the fuel contents gauge in the aircraft.
2. Leaking carburettor fuel drain tap.
3. Engine failure through fuel exhaustion.
4. Engine failure over terrain unsuitable for an autorotational landing.