

**Aviation Safety Investigation Report
198703470**

Hughes 269C

25 March 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: 198703470

Location: 31 km South of Mareeba QLD

Date: 25 March 1987

Highest Injury Level: Fatal

Injuries:

Occurrence Type: Accident

Time: 1130 approx.

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

Aircraft Details: Hughes 269C

Registration: VH-PHK

Serial Number:

Operation Type: Private

Damage Level: Destroyed

Departure Point: Mareeba QLD

Departure Time: 1130 approx.

Destination: Mt Garnet QLD

Approved for Release: September 24th 1987

Circumstances:

On the previous day the pilot had ferried the aircraft to a maintenance organisation for a scheduled servicing. No abnormalities were discovered and a satisfactory engine run was carried out by the pilot prior to DEPARTURE for the return flight. A search was commenced when the helicopter did not arrive at the destination, and the wreckage of the aircraft was located after a VSB signal was heard. The aircraft was lodged in the branches of a tree some 18 metres above ground level. The tail boom was lying near the base of the tree and most components had received substantial impact damage. Examination of the wreckage revealed that the engine had failed during flight. This was caused by a fatigue failure in the number 2 cylinder connecting rod big end cap. The damaged end of the connecting rod broke away a large piece of the crankcase housing the lubricating oil gallery. This led to overheating of bearings through a lack of essential lubrication. The reason for the fatigue crack initiating could not be established because of extensive post fracture mechanical damage at the origin. The terrain over which the aircraft was flying was unsuitable for a forced landing.