

**Aviation Safety Investigation Report
199003070**

Hiller UH-12E

20 May 1990

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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: 199003070
Location: 3 km W of Hay Point QLD
Date: 20 May 1990
Highest Injury Level: Nil
Injuries:

Occurrence Type: Accident
Time: 1730

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

Aircraft Details: Hiller UH-12E
Registration: VH-FFU
Serial Number: 2076
Operation Type: Aerial Work
Damage Level: Substantial
Departure Point: Hay Point QLD
Departure Time: 1727
Destination: 5 km W of Hay Point QLD

Approved for Release: 26th February 1991

Circumstances:

The helicopter was flying between two and three hundred feet above ground level when the pilot noticed severe oscillations of the rotor system, followed by engine stoppage a short time later. During the subsequent forced landing, the right skid contacted the ground at a significant forward speed and the helicopter rolled on to its right side. Examination of the rotor system indicated no apparent faults or failures prior to the accident. Fuel was drained from the fuel tank and the two carburettors (three points). The fuel tank and left carburettor showed clean fuel but the right carburettor contained a small but significant quantity of dirty water and solid debris. The fuel was also discoloured to a grey tone. The quantity of water was sufficient to cause engine rough running (which would induce rotor system oscillation) and engine stoppage. The pilot reported that he had conducted fuel checks before the flight from two drain points, one for the main fuel tank and one for the carburettors, both accessible from the left side of the helicopter. He was not aware that each carburettor had its own drain valve and that there was a total of three drain points.

Significant Factors:

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

1. The pilot was not aware of all the fuel drain points on the helicopter.
2. The engine failed due to water in a carburettor.
3. The pilot misjudged height and speed during the forced landing.