Aviation Safety Investigation Report 198800121

Hughes 269C

26 May 1988

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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: 198800121 **Occurrence Type:** Accident
Location: 16 km West of Meda Station WA
Date: 26 May 1988 **Time:** 645
Highest Injury Level: Nil
Injuries:

	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: Hughes 269C
Registration: VH-UFX
Serial Number: 470593
Operation Type: Aerial Work
Damage Level: Substantial
Departure Point: Meda Station WA
Departure Time: 0545
Destination: Meda Station WA

Approved for Release: 5 April 1989

Circumstances:

The pilot was engaged in mustering operations at 100 feet above ground level and at 60 knots airspeed, when he heard a noise from the rear of the aircraft. He observed the rpm indicators split, with the engine rpm showing an overspeed, and he assumed a clutch cable failure. The aircraft was placed in an autorotational descent. As there was no clear landing area immediately available the pilot turned the aircraft into wind and attempted to find a clear area amongst the trees. The aircraft hit a tree, however, fell to the ground and rolled onto its side. The drive to the main rotors had become disconnected because the cable to the belt drive clutch control tension spring assembly had failed inside the assembly. The cable had been inspected for defects, and none were detected, at the last periodic inspection which occurred 59 hours prior to the accident. The cause of the cable failure could not be determined. The cable had been in service for 2210 hours. It is an "on condition" item, which does not have a specified life. The maintenance system for the aircraft requires that the cable be removed and inspected each 400 hours time in service. Removal is required to inspect the area on the cable that failed. The cable is inspected in situ each 50 hours time in service. The altitude and speed selected by the pilot gave sufficient performance potential for a safe autorotational landing, but the low cruise height significantly reduced the time available to locate and establish an approach into any suitable landing area.

Significant Factors:

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

1. The pilot was operating at a height which significantly reduced his ability to locate and land in a suitable area.

2. The aircraft main rotor drive was disconnected when the belt drive clutch tension spring control cable failed. The reason for this failure could not be determined.

3. The pilot was committed to land the aircraft in unsuitable terrain.

Reccomendations:

1. It is recommended that the Civil Aviation Authority re-emphasises to pilots engaged in agricultural or mustering operations that, whenever possible, operations should be conducted at heights which provide increased safety margins. This should apply particularly to ferry and transit flights, where there is no requirement to operate at low level.

2. It is recommended that the Civil Aviation Authority reviews the failure history of the Hughes 269C clutch cable, with a view to determining whether a specified service life is required.