

**Aviation Safety Investigation Report  
198903751**

**Hughes 369-HS**

**8 February 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](http://www.atsb.gov.au).**

**Occurrence Number:** 198903751  
**Location:** Archerfield QLD  
**Date:** 8 February 1989  
**Highest Injury Level:** Nil  
**Injuries:**

**Occurrence Type:** Accident

**Time:** 724

	Fatal	Serious	Minor	None
Crew	0	0	2	2
Ground	0	0	0	-
Passenger	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>

**Aircraft Details:** Hughes 369-HS  
**Registration:** VH-HUE  
**Serial Number:** 790106S  
**Operation Type:** Private  
**Damage Level:** Substantial  
**Departure Point:** Archerfield QLD  
**Departure Time:** N/A  
**Destination:** Archerfield QLD

**Approved for Release:** 9th August 1989

**Circumstances:**

The pilot was undergoing a routine currency check with a flying instructor. As part of the check the pilot was asked to carry out a hover taxiing autorotation. The power was reduced to flight idle with the aircraft about 5 feet above ground level and moving forward at taxiing speed. The pilot carried out what was considered to be a normal landing, however, shortly after touchdown a loud bang was heard and the tail rotor and stabiliser were seen to land in front of the aircraft. The tailboom had been severed by the mainrotor during the landing. Indentations left by the skids in the soft ground indicated that the aircraft moved forward about 4 metres after initial ground contact. The main rotor was found to have an excessive static droop angle which reduced main rotor tip clearance from the tailboom by approximately 75 millimetres. This, in combination with attitude changes during the touchdown on the soft surface, rotor tilt and reduced rotor RPM, was contributory to the development of the accident.

**Significant Factors:**

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

1. The pilot was performing a practice hover taxiing autorotation onto a soft surface.
2. The soft surface arrested the forward movement of the aircraft sufficiently to cause the tailboom to move upwards towards the main rotor disc.
3. Improper maintenance by maintenance personnel - Main rotor clearance from the tailboom was reduced by the static blade droop being in excess of recommended limits.