Aviation Safety Investigation Report 199800099

Robinson Helicopter Co R22

14 January 1998

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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.

Aviation Safety Investigation Report

199800099

Occurrence Number: 199800099 **Occurrence Type:** Accident
Location: Canberra, Aerodrome
State: ACT **Inv Category:** 4
Date: Wednesday 14 January 1998
Time: 1145 hours **Time Zone** ESuT
Highest Injury Level: Minor
Injuries:

	Fatal	Serious	Minor	None	Total
Crew	0	0	1	1	2
Ground	0	0	0	0	0
Passenger	0	0	0	0	0
Total	**0**	**0**	**1**	**1**	**2**

Aircraft Manufacturer: Robinson Helicopter Co
Aircraft Model: R22 BETA
Aircraft Registration: VH-HFF **Serial Number:** 2585
Type of Operation: Instructional Dual
Damage to Aircraft: Substantial
Departure Point: Canberra
Departure Time: 1040 ESuT
Destination: Canberra

Approved for Release: Friday, July 10, 1998

The helicopter was engaged in a dual training exercise during which a number of autorotational approaches were conducted. These approaches were terminated in a hover using power. The student had completed a number of these approaches when the instructor introduced a 360 degree autorotational approach. The student completed this approach, however the standard to which it was flown was not consistent with the student's previous approaches. In an attempt to restore the student's confidence the instructor asked the student to complete another normal autorotational approach.

This approach was flown in a similar fashion to the previous approaches, however when the helicopter was brought to the hover at the completion of the approach it began to yaw to the right. The instructor attempted to counter this yaw by application of anti-torque pedal however this was not successful. Despite the application of power the helicopter contacted the ground firmly and rolled onto its left side. The instructor and student egressed from the helicopter without difficulty. The air traffic controller on duty did not witness the accident however he did notice that the helicopter was on its side and alerted the Rescue and Fire Fighting services who attended the accident site.

Examination of the accident site revealed that the helicopter came to rest approximately 3 m from the initial point of ground contact. There were only three rotor impact marks on the ground and one tail strike mark. The instructor commented that he had not heard the low rotor RPM warning horn during the approach and attempted hover.

The helicopter was fitted with a system that applied carburettor heat whenever the collective lever was lowered. This had functioned correctly during the normal after-start checks and examination of the system after the accident found no abnormalities.