



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Frederick, MD	<b>Accident Number:</b>	ERA14CA217
<b>Date &amp; Time:</b>	05/01/2014, 1910 EDT	<b>Registration:</b>	N802CP
<b>Aircraft:</b>	ROBINSON HELICOPTER R22 BETA	<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

## Analysis

According to the flight instructor, his student was practicing hover operations over a grassy area of the airport. This was the first flight in a helicopter for the student pilot. The helicopter drifted to the right while descending. The right skid contacted the grass and the helicopter rolled to the right and the main rotor blades contacted the ground. The helicopter continued to roll over and came to rest on its right side. An inspector from the Federal Aviation Administration examined the helicopter and confirmed substantial damage to the fuselage, tail boom, and main rotor blades. The pilots reported no pre-impact mechanical malfunctions or failures with the helicopter that would have precluded normal operation.

## Flight Events

Maneuvering-hover - Dynamic rollover

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's failure to maintain directional control during the hover, and the flight instructors lack of remedial action, resulting in a dynamic rollover and structural damage to the helicopter.

## Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Directional control-Not attained/maintained - C

Personnel issues-Task performance-Use of equip/info-Aircraft control-Student/instructed pilot - C

Personnel issues-Action/decision-Action-Lack of action-Instructor/check pilot - C

## Flight Instructor Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	32
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane; Helicopter
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine; Helicopter; Instrument Airplane; Instrument Helicopter
<b>Flight Time:</b>	3060 hours (Total, all aircraft), 208 hours (Total, this make and model), 2990 hours (Pilot In Command, all aircraft), 140 hours (Last 90 days, all aircraft), 47 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

## Student Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	50
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	(Estimated) 3361 hours (Total, all aircraft), 1 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	ROBINSON HELICOPTER	<b>Registration:</b>	N802CP
<b>Model/Series:</b>	R22 BETA BETA	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	ADVANCED HELICOPTER CONCEPTS INC	<b>Engine Manufacturer:</b>	LYCOMING
<b>Air Carrier Operating Certificate:</b>	None	<b>Engine Model/Series:</b>	0-320 SERIES
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

## Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>	FDK, 306 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Lowest Ceiling:</b>	Broken / 9000 ft agl
<b>Condition of Light:</b>	Day	<b>Wind Speed/Gusts, Direction:</b>	9 knots, 310°
<b>Temperature:</b>	22° C / 11° C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Frederick, MD (FDK)	<b>Destination:</b>	Frederick, MD (FDK)

## Airport Information

<b>Airport:</b>	FREDERICK MUNI (FDK)	<b>Runway Surface Type:</b>	N/A
<b>Runway Used:</b>	N/A	<b>Runway Surface Condition:</b>	
<b>Runway Length/Width:</b>			

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Ralph E Hicks	<b>Adopted Date:</b>	06/05/2014
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.		
<b>Investigation Docket:</b>	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=89154">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=89154</a>		

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