



National Transportation Safety Board Aviation Accident Final Report

Location:	Rochester, NH	Accident Number:	NYC06CA041
Date & Time:	12/03/2005, 1500 EST	Registration:	N40CP
Aircraft:	Robinson R-22B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

The certificated flight instructor (CFI) and student pilot were practicing hovering over a grass area. The CFI reported that the student pilot was flying the helicopter, while he "shadowed" the controls and performed corrective inputs. While hovering, the helicopter's tail rotor contacted the ground and the helicopter rolled over onto its right side. Examination of the helicopter did not reveal any pre-impact malfunctions. Winds reported at the airport, about the time of the accident were variable from 230 to 300 degrees, with the predominate wind from 280 degrees at 7 knots, gusting to 20 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's failure to maintain adequate clearance while providing hovering instruction, which resulted in tail rotor ground contact. A factor in this accident was the gusty wind conditions.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: HOVER

Findings

1. (F) WEATHER CONDITION - GUSTS
2. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND(CFI)

Factual Information

Flight Instructor Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	58, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane; Instrument Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 With Waivers/Limitations	Last Medical Exam:	11/01/2004
Occupational Pilot:		Last Flight Review or Equivalent:	01/01/2004
Flight Time:	8570 hours (Total, all aircraft), 288 hours (Total, this make and model), 7547 hours (Pilot In Command, all aircraft), 56 hours (Last 90 days, all aircraft), 33 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Student Pilot Information

Certificate:	None	Age:	, Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Unknown Unknown	Last Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Robinson	Registration:	N40CP
Model/Series:	R-22B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	0638
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	11/01/2005, 100 Hour	Certified Max Gross Wt.:	1370 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1960 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-B2C
Registered Owner:	Four M Leasing Inc.	Rated Power:	131 hp
Operator:	C-R Helicopters Inc.	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	DAW, 322 ft msl	Observation Time:	1451 EST
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	1°C / -15°C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	7 knots/ 20 knots, 280°	Visibility (RVR):	
Altimeter Setting:	29.78 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Rochester, NH (DAW)	Type of Flight Plan Filed:	None
Destination:	Rochester, NH (DAW)	Type of Clearance:	None
Departure Time:	EST	Type of Airspace:	

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:		IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None		

Administrative Information

Investigator In Charge (IIC): Luke Schiada **Adopted Date:** 04/25/2006

Additional Participating Persons: Sandy Taylor; FAA\FSDO; Portland, ME

Publish Date:

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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