



National Transportation Safety Board Aviation Accident Final Report

Location:	Prescott, AZ	Accident Number:	LAX08CA126
Date & Time:	05/01/2008, 1830 MST	Registration:	N331MD
Aircraft:	Robinson R22 Beta II	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

This was the certificated flight instructor's (CFI) first instructional flight with this new primary student. They did a preflight inspection of the helicopter together, and departed for the practice area. Once the student had a general understanding of the controls, they did an approach to a point on the ground that terminated in a hover. The CFI was letting the student manipulate the controls more and more during the hover. The CFI positioned the helicopter for a slight right quartering headwind to compensate for translating tendencies. During hover, the helicopter exhibited a pendulum oscillation that is common for new students learning to hover. During one of the right lateral oscillations, the helicopter unexpectedly lost altitude. The right skid contacted the ground, and the helicopter rolled onto its right side. Within seconds, it caught on fire. Both pilots exited immediately. The CFI stated that the airplane and engine had no mechanical failures or malfunctions during the flight.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The instructor's inadequate supervision and delayed remedial action that resulted in ground contact and a rollover.

Findings

Aircraft	Altitude - Not attained/maintained
Personnel issues	Delayed action - Pilot (Cause)
	Monitoring other person - Pilot (Cause)

Factual Information

History of Flight

Maneuvering-hover	Collision with terr/obj (non-CFIT) (Defining event)
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Flight Instructor Information

Certificate:	Flight Instructor; Commercial	Age:	32, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter; Instrument Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2	Last Medical Exam:	05/01/2007
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	04/01/2007
Flight Time:	992 hours (Total, all aircraft), 659 hours (Total, this make and model), 183 hours (Last 90 days, all aircraft), 51 hours (Last 30 days, all aircraft)		

Student Pilot Information

Certificate:	Student	Age:	21, 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:	Class 1	Last Medical Exam:	08/01/2007
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	41 hours (Total, all aircraft), 0 hours (Total, this make and model), 2 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Robinson	Registration:	N331MD
Model/Series:	R22 Beta II	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	2886
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	03/01/2008, 100 Hour	Certified Max Gross Wt.:	1370 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	6129 Hours	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	O-360-J2A
Registered Owner:	Guidance Helicopters, Inc.	Rated Power:	145 hp
Operator:	Guidance Helicopters, Inc.	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	PRC, 5045 ft msl	Observation Time:	1753 MST
Distance from Accident Site:	10 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	210°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	16 °C / -21 °C
Lowest Ceiling:	None	Visibility:	10 Miles
Wind Speed/Gusts, Direction:	12 knots, 350°	Visibility (RVR):	
Altimeter Setting:	29.92 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Prescott, AZ (PRC)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1800	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Serious, 1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 Serious, 1 Minor		

Administrative Information

Investigator In Charge (IIC):	Howard D Plagens	Adopted Date:	06/30/2008
Additional Participating Persons:	Fred Murray; Federal Aviation Administration; Scottsdale, AZ		
Publish Date:	02/03/2009		
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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