



National Transportation Safety Board Aviation Accident Data Summary

Location:	Tampa, FL	Accident Number:	ERA13LA104
Date & Time:	01/02/2013, 1810 EST	Registration:	N345VH
Aircraft:	ROBINSON HELICOPTER R22 BETA	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The flight instructor and her student were practicing autorotations. The student entered a practice autorotation at 500 feet above ground level (agl) and at 70 knots. About 40 feet agl, the student bled off airspeed by flaring the helicopter. The student advanced the throttle, but the rpm started to decay. The instructor had her hands on the controls and added throttle to arrest the rpm decay. When the rpm continued to decay, she took the controls and performed a hovering autorotation. The helicopter impacted a grassy area next to the runway, bounced, and rolled over, coming to an immediate stop. The fuselage and main rotor sustained substantial damage. The flight instructor reported that there was excessive play in the left throttle and that she had reported the condition to the operator's mechanic twice previously. Examination of the throttle system found it to be in an airworthy condition.

Flight Events

Autorotation - Hard landing

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's delayed throttle application during the practice autorotation and the flight instructor's lack of immediate remedial action, which resulted in a hard landing.

Findings

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

Personnel issues-Task performance-Use of equip/info-Use of equip/system-Student pilot - C

Personnel issues-Action/decision-Action-Delayed action-Instructor/check pilot - C

Flight Instructor Information

Certificate:	Flight Instructor; Commercial	Age:	41
Airplane Rating(s):	None	Instrument Rating(s):	None
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	Helicopter
Flight Time:	871 hours (Total, all aircraft), 820 hours (Pilot In Command, all aircraft), 89 hours (Last 90 days, all aircraft), 56 hours (Last 30 days, all aircraft)		

Student Pilot Information

Certificate:	Student	Age:	35
Airplane Rating(s):	None	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	68 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	ROBINSON HELICOPTER	Registration:	N345VH
Model/Series:	R22 BETA	Engines:	1 Reciprocating
Operator:	Helicopter Academy	Engine Manufacturer:	LYCOMING
Air Carrier Operating Certificate:	None	Engine Model/Series:	O-320 SERIES
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	TPF, 7 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Dusk	Wind Speed/Gusts, Direction:	Calm
Temperature:	21° C / 17° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Clearwater, FL (PIE)	Destination:	Tampa, FL (TPF)

Airport Information

Airport:	Peter O Knight Airport (TPF)	Runway Surface Type:	Asphalt
Runway Used:	22	Runway Surface Condition:	Dry
Runway Length/Width:	3580 ft / 100 ft		

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

Administrative Information

Investigator In Charge (IIC):	Ralph E Hicks	Adopted Date:	08/07/2013
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=85946		

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