



National Transportation Safety Board Aviation Accident Final Report

Location:	Barranquitas, PR	Accident Number:	ERA15CA089
Date & Time:	01/02/2015, 1640 AST	Registration:	N3183T
Aircraft:	ROBINSON HELICOPTER COMPANY R44 II	Aircraft Damage:	Substantial
Defining Event:	Tailstrike	Injuries:	1 Minor, 2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

After renting the helicopter from a flight school, the pilot took off and flew to a nearby town where he picked up two passengers. He then flew them to another town to attend a party. During the flights everything was normal. Upon arrival at their destination, the pilot began to circle and asked one of the passengers to call a friend who was on the ground on his cell phone, to check the landing area to make sure it was clear for him to land. After the pilot was told it was "clear for landing," he started a smooth descent "with all of the instruments in the green arc," to the landing area which was located on a dirt road on the ridge of a mountain. The landing was smooth and the pilot touched down lightly on the skids. While the helicopter had not fully set down and was still light on the skids, he began to check the "balance of the helicopter" before setting the collective to the full down position. When he moved the cyclic forward, the helicopter pitched forward. Then when he moved the cyclic aft to its previous position, the helicopter pitched aft and he heard a "big noise" and felt a vibration. He immediately "pulled" collective and rolled the throttle to the full throttle position to get the helicopter back into the air but, the helicopter started to spin clockwise and he could not stop the rotation, even with the application of full left pedal. He then leveled the helicopter while it was still spinning and tried to make it back to the landing site but, there was not enough power to keep it airborne. The left skid then contacted the ground and the helicopter rolled over on to its left side. Postaccident examination of the helicopter by a Federal Aviation Administration inspector revealed that the tail rotor assembly and tail boom were substantially damaged.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain control of the helicopter while landing which resulted in a tailrotor ground strike and collision with terrain.

Findings

Aircraft

Personnel issues

Aircraft control - Pilot (Cause)

Decision making/judgment - Pilot (Cause)

Factual Information

History of Flight

Landing	Tailstrike (Defining event)
Landing-aborted after touchdown	Attempted remediation/recovery
Maneuvering-hover	Loss of tail rotor effectiveness Loss of control in flight
Uncontrolled descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	50
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With Waivers/Limitations	Last Medical Exam:	03/22/2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	03/17/2013
Flight Time:	583 hours (Total, all aircraft), 36 hours (Total, this make and model), 504 hours (Pilot In Command, all aircraft), 62 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	ROBINSON HELICOPTER COMPANY	Registration:	N3183T
Model/Series:	R44 II	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	11550
Landing Gear Type:	Skid;	Seats:	4
Date/Type of Last Inspection:	11/08/2014, Annual	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:	1 Hours	Engines:	1 Reciprocating
Airframe Total Time:	451.1 Hours	Engine Manufacturer:	LYCOMING
ELT:	C91 installed, activated, aided in locating accident	Engine Model/Series:	IO-540-AE1A5
Registered Owner:	FLIGHT WORLD INC	Rated Power:	245 hp
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	TJSJ, 9 ft msl	Observation Time:	1656 AST
Distance from Accident Site:	24 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	48°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Scattered / 2600 ft agl	Temperature/Dew Point:	27° C / 22° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	13 knots, 70°	Visibility (RVR):	
Altimeter Setting:	30.12 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Vega Baja, PR (NONE)	Type of Flight Plan Filed:	None
Destination:	Barranquitas, PR (NONE)	Type of Clearance:	None
Departure Time:	1630 AST	Type of Airspace:	Class G

Airport Information

Airport:	Ridge Line (NONE)	Runway Surface Type:	Dirt; Grass/turf
Airport Elevation:	2149 ft	Runway Surface Condition:	Dry; Rough; Vegetation
Runway Used:	N/A	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 2 None		

Administrative Information

Investigator In Charge (IIC):	Todd G Gunther	Adopted Date:	06/01/2015
Additional Participating Persons:	Manuel Cepeda; FAA / FSDO; San Juan, PR		
Publish Date:	06/01/2015		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=90559		

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