



National Transportation Safety Board Aviation Accident Data Summary

Location:	Gillett, TX	Accident Number:	CEN13LA148
Date & Time:	02/01/2013, 1500 CST	Registration:	N3059Q
Aircraft:	ROBINSON R22 BETA II	Injuries:	2 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot and a passenger were conducting an aerial hunt at low altitude. The pilot said he was about 20 feet above 30-foot-tall trees and flying into the wind slowly when the tail rotor "malfunctioned" and he lost control. The helicopter started spinning to the right, and the pilot initiated an autorotation. The helicopter landed hard and rolled over on its left side. The pilot stated that he thought the helicopter had lost tail rotor authority. Examination of the tail rotor found no evidence of a tail rotor malfunction or defects that would preclude normal operation. The pilot was operating the helicopter in a low airspeed, out of ground effect, high-power-demand flight condition, which was conducive to the development of loss of tail rotor effectiveness.

Flight Events

Maneuvering - Loss of tail rotor effectiveness
Autorotation - Hard landing

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
A loss of tail rotor effectiveness while maneuvering at low altitude.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Prop/rotor parameters-
Capability exceeded - C
Personnel issues-Action/decision-Action-Incorrect action performance-Pilot - C

Pilot Information

Certificate:	Private	Age:	29
Airplane Rating(s):	None	Instrument Rating(s):	None
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	None
Flight Time:	222 hours (Total, all aircraft), 222 hours (Total, this make and model), 128 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	ROBINSON	Registration:	N3059Q
Model/Series:	R22 BETA II	Engines:	1 Reciprocating
Operator:	Jams M. Janysek	Engine Manufacturer:	Lycoming
Air Carrier Operating Certificate:	None	Engine Model/Series:	O-360-J2A
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KSAT, 809 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	11 knots/ 21 knots, 170°
Temperature:	22°C / 1°C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	Karnes City, TX (NONE)	Destination:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Arnold W Scott	Adopted Date:	08/07/2013
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=86129		

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