



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Fort Davis, TX	<b>Accident Number:</b>	GAA15CA032
<b>Date &amp; Time:</b>	04/03/2015, 1115 CDT	<b>Registration:</b>	N8363D
<b>Aircraft:</b>	ROBINSON HELICOPTER R22 BETA	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Settling with power/vortex ring state	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

The pilot stated he was positioning the helicopter to have the sole passenger take a photograph of an animal and a settling with power condition occurred. The pilot stated that a gust of wind came from a nearby hill and began to push the helicopter toward the ground so the pilot conducted a running landing to an open field. During the landing, the pilot reported that the helicopter struck an anthill and rolled sideways. The helicopter sustained substantial damage to the tail boom.

The pilot verified that there were no pre-impact mechanical failures or malfunctions with the airframe or engine that would have precluded normal operation.

## 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 during flight, which resulted in the helicopter impacting terrain.

## Findings

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<b>Aircraft</b>	Prop/rotor parameters - Not attained/maintained (Cause)
<b>Personnel issues</b>	Aircraft control - Pilot (Cause)
<b>Environmental issues</b>	Gusts - Effect on operation Debris/dirt/foreign object - Contributed to outcome

## Factual Information

### History of Flight

Maneuvering-low-alt flying	Settling with power/vortex ring state (Defining event)
Landing-landing roll	Loss of control on ground Dynamic rollover

### Pilot Information

Certificate:	Commercial	Age:	31
Airplane Rating(s):	None	Seat Occupied:	Unknown
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 2 Unknown	Last Medical Exam:	09/04/2014
Occupational Pilot:		Last Flight Review or Equivalent:	08/30/2013
Flight Time:	(Estimated) 3500 hours (Total, all aircraft), 2800 hours (Total, this make and model), 100 hours (Last 90 days, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Manufacturer:	ROBINSON HELICOPTER	Registration:	N8363D
Model/Series:	R22 BETA BETA	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	2745
Landing Gear Type:	Skid;	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1369 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	O-320
Registered Owner:	Kyle Lange	Rated Power:	160 hp
Operator:	On file	Air Carrier Operating Certificate:	None

## Meteorological Information and Flight Plan

Observation Facility, Elevation:	KMRF, 4849 ft msl	Observation Time:	1615 UTC
Distance from Accident Site:	11 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	146°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	22° C / -2° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	5 knots, 10°	Visibility (RVR):	
Altimeter Setting:	30.22 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fort Davis, TX	Type of Flight Plan Filed:	None
Destination:	Fort Davis, TX	Type of Clearance:	None
Departure Time:	CDT	Type of Airspace:	Class G

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	Michael J Hodges	Adopted Date:	06/09/2015
Additional Participating Persons:	Craig M Patterson; FAA Lubbock FSDO; Lubbock, TX		
Publish Date:	10/21/2015		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=90977">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=90977</a>		

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