



# Aviation Investigation Final Report

<b>Location:</b>	Howe, Idaho	<b>Accident Number:</b>	WPR22LA132
<b>Date &amp; Time:</b>	March 22, 2022, 11:00 Local	<b>Registration:</b>	N44DQ
<b>Aircraft:</b>	ROBINSON HELICOPTER COMPANY R44 II	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	2 Minor, 1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot of the helicopter reported that, while flying in mountainous terrain, he decided to land on top of a ridge for a rest break. The pilot performed a circling reconnaissance of the area before he began his descent to his intended landing spot. During the descent, the pilot felt a wind gust from behind, then the rotor rpm began to decay, and the low rotor rpm light illuminated along with the aural warning horn. The pilot attempted to reestablish power without success as the helicopter continued to descend. To avoid going over the ridge, the pilot intentionally lowered the helicopter to the ground and rolled the helicopter onto its right side. The helicopter sustained substantial damage to the fuselage and tail boom. The pilot reported that there were no preaccident mechanical failures or malfunctions with the helicopter 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 adequate rotor rpm while descending with a gusting tailwind condition, which resulted in a loss of helicopter control.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Descent/approach/glide path - Not attained/maintained
<b>Environmental issues</b>	Tailwind - Effect on equipment

## Factual Information

### History of Flight

<b>Approach</b>	Loss of control in flight (Defining event)
<b>Landing</b>	Hard landing

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	60, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	5-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	May 12, 2020
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	April 24, 2021
<b>Flight Time:</b>	1863 hours (Total, all aircraft), 600 hours (Total, this make and model), 1863 hours (Pilot In Command, all aircraft)		

### Passenger Information

<b>Certificate:</b>		<b>Age:</b>	Female
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	5-point
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Passenger Information

<b>Certificate:</b>		<b>Age:</b>	Male
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	ROBINSON HELICOPTER COMPANY	<b>Registration:</b>	N44DQ
<b>Model/Series:</b>	R44 II	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>	2005	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	10821
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	2500 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>		<b>Engine Model/Series:</b>	IO 540-AE1A5
<b>Registered Owner:</b>		<b>Rated Power:</b>	
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KRXE,4858 ft msl	<b>Distance from Accident Site:</b>	54 Nautical Miles
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	107°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Overcast / 6000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/ Terrain-Induced
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/ Severe
<b>Altimeter Setting:</b>	30.4 inches Hg	<b>Temperature/Dew Point:</b>	1°C / -4°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Grace, ID (RXE)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Rexburg, ID (RXE)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	08:15 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Minor, 1 None	<b>Latitude, Longitude:</b>	44.1042,-113.0019

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Rho, Paul		
<b>Additional Participating Persons:</b>	Howard Dunn; FAA FSDO; Boise, ID		
<b>Original Publish Date:</b>	November 3, 2022	<b>Investigation Class:</b>	4
<b>Note:</b>	The NTSB did not travel to the scene of this accident.		
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=104844">https://data.nts.gov/Docket?ProjectID=104844</a>		

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