



Aviation Investigation Final Report

Location: Skwentna, Alaska Accident Number: ANC23LA032

Date & Time: May 9, 2023, 12:00 Local Registration: N704T

Aircraft: ROBINSON HELICOPTER R44 II Aircraft Damage: Substantial

Defining Event: Other weather encounter **Injuries:** 2 Minor, 1 None

Flight Conducted Under: Part 135: Air taxi & commuter - Non-scheduled

Analysis

The pilot reported that, he was flying uphill over an area of snow-covered, mountainous terrain, when he encountered flat light and whiteout conditions, which made it difficult to discern topographical features. In an attempt to maintain visual reference with the ground, he turned the helicopter to the right to fly back down the hill. Subsequently, the right landing gear skid contacted terrain and the helicopter entered a dynamic rollover to the right, resulting in substantial damage to the fuselage, tail boom, and powertrain system. The pilot reported that there were no preaccident mechanical malfunctions or anomalies 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 altitude/clearance from terrain while maneuvering in adverse weather conditions, which resulted in a dynamic rollover.

Findings

Environmental issues	Whiteout - Effect on operation
Personnel issues	Identification/recognition - Pilot
Personnel issues	Decision making/judgment - Pilot
Environmental issues	Snow - Decision related to condition

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Factual Information

History of Flight

Maneuvering	Other weather encounter (Defining event)
Maneuvering	Loss of visual reference

Pilot Information

Certificate:	Commercial	Age:	45,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	November 16, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 19, 2023
Flight Time:	10570 hours (Total, all aircraft), 398 hours (Total, this make and model)		

Passenger Information

Certificate:	Age:	
Airplane Rating(s):	Seat Occupied:	Left
Other Aircraft Rating(s):	Restraint Used:	3-point
Instrument Rating(s):	Second Pilot Present:	No
Instructor Rating(s):	Toxicology Performed:	
Medical Certification:	Last FAA Medical Exam:	
Occupational Pilot:	Last Flight Review or Equivalent:	
Flight Time:		

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Passenger Information

Certificate:	Age:	
Airplane Rating(s):	Seat Occupied:	Rear
Other Aircraft Rating(s):	Restraint Used:	3-point
Instrument Rating(s):	Second Pilot Present:	No
Instructor Rating(s):	Toxicology Performed:	
Medical Certification:	Last FAA Medical Exam:	
Occupational Pilot:	Last Flight Review or Equivalent:	
Flight Time:		

Aircraft and Owner/Operator Information

Aircraft Make:	ROBINSON HELICOPTER	Registration:	N704T
Model/Series:	R44 II	Aircraft Category:	Helicopter
Year of Manufacture:	2004	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	10343
Landing Gear Type:	None; Skid	Seats:	4
Date/Type of Last Inspection:	December 22, 2022 Annual	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3191.4 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	C126 installed, not activated	Engine Model/Series:	IO-540-AE1A5
Registered Owner:	C & J LEASING LLC	Rated Power:	260 Horsepower
Operator:	Willow Creek Aviation	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	Remote Alaska Air	Operator Designator Code:	EMVC

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Unknown	Condition of Light:	Day
Observation Facility, Elevation:	PAWS,354 ft msl	Distance from Accident Site:	64 Nautical Miles
Observation Time:	11:56 Local	Direction from Accident Site:	100°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / 18 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.82 inches Hg	Temperature/Dew Point:	9°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Skwentna, AK (SKW)	Type of Flight Plan Filed:	Company VFR
Destination:	Skwentna, AK	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 1 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 Minor, 1 None	Latitude, Longitude:	61.774586,-151.7413

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Administrative Information

Investigator In Charge (IIC):	Ward, Mark
Additional Participating Persons:	Paula Huckleberry; FAA; Anchorage, AK
Original Publish Date:	July 7, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=139291

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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