









Aviation Investigation Final Report

Location: Gilbertsville, Kentucky Accident Number: ERA24LA236

Date & Time: June 2, 2024, 13:15 Local Registration: N220SW

Aircraft: Robinson R44 Aircraft Damage: Substantial

Defining Event: Collision with terr/obj (non-CFIT) **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The helicopter pilot initially landed on his private property, but then decided he wanted to move to an area that was flatter. He described that when he raised the collective pitch control the helicopter "moved back." Before he was able to recover, the main rotor blades contacted the upsloping terrain, resulting in a rollover and substantial damage to the fuselage. The pilot reported that there were no preimpact mechanical malfunctions or failures of 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 control of the helicopter while attempting to take off from sloping terrain.

Findings

Personnel issues Aircraft control - Pilot

Aircraft Pitch control - Not attained/maintained

Factual Information

History of Flight

Takeoff Collision with terr/obj (non-CFIT) (Defining event)	
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Pilot Information

Certificate:	Commercial	Age:	86,Male
Airplane Rating(s):	Single-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:	None	Last FAA Medical Exam:	May 15, 2021
Occupational Pilot:	No	Last Flight Review or Equivalent:	February 15, 2021
Flight Time:	13450 hours (Total, all aircraft), 550 Command, all aircraft)	hours (Total, this make and model), 8	220 hours (Pilot In

Aircraft and Owner/Operator Information

Aircraft Make:	Robinson	Registration:	N220SW
Model/Series:	R44 II	Aircraft Category:	Helicopter
Year of Manufacture:	2016	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	14013
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	February 22, 2024 Annual	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	202 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	IO-540-AE145
Registered Owner:	SDW LLC	Rated Power:	230 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Page 2 of 4 ERA24LA236

Meteorological Information and Flight Plan

Visual (VMC)	Condition of Light:	Day
CEY,578 ft msl	Distance from Accident Site:	18 Nautical Miles
13:15 Local	Direction from Accident Site:	203°
Few / 3800 ft AGL	Visibility	10 miles
	Visibility (RVR):	
7 knots /	Turbulence Type Forecast/Actual:	Unknown / None
230°	Turbulence Severity Forecast/Actual:	Unknown / N/A
30.01 inches Hg	Temperature/Dew Point:	28°C / 20°C
No Obscuration; No Precipitation		
Carmi, IL	Type of Flight Plan Filed:	None
Gilbertsville, KY	Type of Clearance:	None
12:35 Local	Type of Airspace:	Class G
	CEY,578 ft msl 13:15 Local Few / 3800 ft AGL 7 knots / 230° 30.01 inches Hg No Obscuration; No Precipital Carmi, IL Gilbertsville, KY	CEY,578 ft msl Distance from Accident Site: 13:15 Local Direction from Accident Site: Few / 3800 ft AGL Visibility Visibility (RVR): 7 knots / Turbulence Type Forecast/Actual: 230° Turbulence Severity Forecast/Actual: 30.01 inches Hg Temperature/Dew Point: No Obscuration; No Precipitation Carmi, IL Type of Flight Plan Filed: Gilbertsville, KY Type of Clearance:

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	36.93702,-88.22934

Page 3 of 4 ERA24LA236

Administrative Information

Investigator In Charge (IIC):	Spencer, Lynn
investigator in onarge (no).	openoei, zymi
Additional Participating Persons:	Gary Austin; FAA/FSDO; Louisville, KY
Original Publish Date:	June 28, 2024
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=194359

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.

Page 4 of 4 ERA24LA236