



Aviation Investigation Factual Report

Location: Bronson, Florida

Date & Time: December 30, 2021, 20:25 Local

Aircraft: ROBINSON HELICOPTER COMPANY R44 II

Defining Event: Loss of control in flight

Flight Conducted Under: Part 91: General aviation - Personal

Accident Number: ERA22FA098

Registration: N442VB

Aircraft Damage: Destroyed

Injuries: 4 Fatal

Factual Information

HISTORY OF FLIGHT

On December 30, 2021, about 2025 eastern standard time, a Robinson R44 II, N442VB, was destroyed when it was involved in an accident near Bronson, Florida. The pilot and three passengers were fatally injured. The helicopter was operated as a Title 14 Code of Federal Regulations Part 91 personal flight.

The pilot was not instrument rated and the helicopter was not certified for flight in instrument conditions. The pilot departed a private residence located in Bronson, Florida, about 2023, destined for his personal residence in Bell, Florida. According to automatic dependent surveillance-broadcast data provided by the Federal Aviation Administration, the helicopter departed about 2.5 miles south of the accident site. The helicopter flew northwest about 1.5 miles, then turned right and flew northeast for 1 mile. During the last .5 miles, the helicopter descended from 700 ft mean sea level (msl), to 350 ft msl, then climbed back up to 625 ft msl. The last data point showed the helicopter descending again at 550 ft msl.

A witness at the residence from which the pilot departed stated that the pilot was checking the weather and wanted to depart soon. He stated that the pilot said the fog and visibility was getting "bad" and his initial route home did not look good, and they needed to take another route home.

A witness, who was out walking her dog, stated that she heard a helicopter about 2025. She looked for the helicopter but could not see it because it was too dark outside, and she did not see any lights. Seconds later, she heard the helicopter crash and a "large fireball" light up the sky.

METEOROLOGICAL INFORMATION

Williston Municipal Airport (X60), Williston, Florida, was located about 10 miles east-southeast of the accident site. At 2035, recorded weather at X60 included calm wind, visibility of 7 statute miles, mist, scattered clouds at 500 ft agl, temperature of 21°C, dew point temperature of 20°C, altimeter setting of 30.08 inches of mercury.

The NWS Weather Forecast Office (WFO) in Tampa Bay, Florida, issued the following "Update" section of an Area Forecast Discussion (AFD) at 1908. This was the last AFD issued from this WFO before the accident.

UPDATE...

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Atmospheric conditions are very favorable for widespread radiational dense fog over land and advection fog over marine zones this evening, tonight and into Friday morning. An expanding area of low clouds and sea fog has already developed from Sarasota County through Tampa Bay and into portions of the Nature Coast with near zero visibility reported in Venice early this evening. Later this evening expected fog development to expand and become widespread and very dense overnight. Expect Dense Fog Advisories to be issued as fog impacts more areas into tonight.

WRECKAGE AND IMPACT INFORMATION

The accident site was located in a wooded area and the wreckage path was about 225 ft long. The helicopter was heavily fragmented and scattered along a debris path on a heading of about 360° magnetic. The right skid was embedded in the ground at a 42° angle. An 8-footlong section of the main rotor blade was embedded in the ground about 3 ft deep. The engine was located about 225 ft north of the main impact point. The main rotor gearbox and sections of the main rotor blades were located about 175 feet northeast of the main impact point.

The main rotor gearbox was forwarded to the manufacturer for further examination. The examination revealed that the damage to the gearbox was impact related and no preimpact anomalies were noted. Examination of the engine did not reveal any preimpact mechanical malfunctions.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy of the pilot was performed by the Office of the Medical Examiner, District 8, Gainesville, Florida. The autopsy report was reviewed by the NTSB Investigator-In-Charge. According to the autopsy report, the cause of death was injuries sustained in a helicopter crash, and the manner of death was accident.

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Pilot Information

Certificate:	Private	Age:	36,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	February 20, 2020
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	360 hours (Total, all aircraft), 144 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	ROBINSON HELICOPTER COMPANY	Registration:	N442VB
Model/Series:	R44 II	Aircraft Category:	Helicopter
Year of Manufacture:	2019	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	14296
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	January 14, 2021 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	319.48 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-540
Registered Owner:	On file	Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	KCTY,38 ft msl	Distance from Accident Site:	27 Nautical Miles
Observation Time:	20:35 Local	Direction from Accident Site:	298°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Overcast / 600 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.06 inches Hg	Temperature/Dew Point:	22°C / 21°C
Precipitation and Obscuration:			
Departure Point:	Bronson, FL	Type of Flight Plan Filed:	None
Destination:	Bell, FL	Type of Clearance:	None
Departure Time:	20:23 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	3 Fatal	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 Fatal	Latitude, Longitude:	29.419204,-82.646579(est)

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Administrative Information

Investigator In Charge (IIC): Boggs, Daniel

Additional Participating Mike Childers; Lycoming ; Atlanta, GA

Persons: Thom Webster; Robinson Helicopters; Torrance, CA

Ismael Reyes; FAA Tampa; Tampa, FL

Report Date:

Last Revision Date:

Investigation Class: Class 3

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=104462

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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