



Aviation Investigation Final Report

Location:	LaPlace, Louisiana	Accident Number:	CEN22FA073
Date & Time:	December 14, 2021, 12:36 Local	Registration:	N150AS
Aircraft:	BELL HELICOPTER TEXTRON CANADA 407	Aircraft Damage:	Destroyed
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was operating the helicopter in an area of low cloud ceilings, fog, and mist. Flight data showed that the helicopter's altitude varied and that the maximum altitude reached was 175 ft above ground level. The last recorded altitude was 75 ft. The helicopter subsequently collided with a guy wire suspended between two transmission line trusses and impacted the highway below. A postimpact fire ensued and destroyed the helicopter.

Postaccident examination of the airframe and engine revealed no anomalies that would have precluded normal operation of the helicopter. The pilot did not receive an official weather briefing before the flight. After the accident, a US Coast Guard pilot was deployed to the accident area. The Coast Guard pilot stated that a "wall of clouds" extended from the power lines westward to the accident area. Thus, the accident pilot likely could not see the power lines due to the reduced visibilities in mist and clouds at the accident time.

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 clearance from power lines. Contributing to the accident was the pilot's decision to fly in instrument conditions.

Findings

Personnel issues	Decision making/judgment - Pilot
Environmental issues	Low ceiling - Effect on operation
Environmental issues	Clouds - Effect on operation

Factual Information

History of Flight

Enroute-cruise	Collision with terr/obj (non-CFIT) (Defining event)
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On December 14, 2021, about 1236 central standard time, a Bell 407 helicopter, N150AS, was destroyed when it was involved in an accident near LaPlace, Louisiana. The pilot was fatally injured. The helicopter was operating as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The helicopter departed from the Gonzales, Louisiana, area and was en route to New Orleans Lakefront Airport (NEW), New Orleans, Louisiana. Automatic dependent surveillance-broadcast (ADS-B) data tracked the helicopter's flightpath as it flew toward NEW. The helicopter's altitude varied between 75 and 175 ft above ground level (agl). About 0.88 miles from the accident site, the helicopter descended to 50 ft agl. The last ADS-B data point, at 1236:26, indicated that the helicopter was near the intersection of transmission lines over Interstate 10. At that time, the helicopter was traveling at a groundspeed of about 104 knots and an altitude of 75 ft agl.

The helicopter subsequently collided with a western guy wire suspended between two transmission line trusses. The guy wire was estimated to be about 130 ft above a trestle bridge on the highway. Several commercial vehicle video cameras captured the helicopter's descent and impact with the highway. A postimpact fire ensued and destroyed the helicopter.

Pilot Information

Certificate:	Commercial; Private	Age:	42, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter; Unmanned (sUAS)	Restraint Used:	4-point
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	Yes
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	October 1, 2021
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 7, 2020
Flight Time:	2049.6 hours (Total, all aircraft), 156 hours (Total, this make and model)		

A review of the pilot's logbook revealed that he had 12 hours of instrument flight experience, all of which were logged in fixed-wing aircraft. The pilot's most recent instrument flight was on May 21, 2019.

Aircraft and Owner/Operator Information

Aircraft Make:	BELL HELICOPTER TEXTRON CANADA	Registration:	N150AS
Model/Series:	407 NO SERIES	Aircraft Category:	Helicopter
Year of Manufacture:	2016	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	54658
Landing Gear Type:	High skid	Seats:	8
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	6000 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	as of last inspection	Engine Manufacturer:	Rolls-Royce
ELT:		Engine Model/Series:	250-C47B/8
Registered Owner:	RC SMITH AVIATION LLC	Rated Power:	
Operator:	RC SMITH AVIATION LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	KAPS, 6 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	12:35 Local	Direction from Accident Site:	280°
Lowest Cloud Condition:		Visibility	4 miles
Lowest Ceiling:	Broken / 400 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.31 inches Hg	Temperature/Dew Point:	19°C / 19°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	Baton Rouge, LA	Type of Flight Plan Filed:	None
Destination:	New Orleans, LA (KNEW)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class E

A review of meteorological information revealed that no frontal boundaries were near the accident site. The closest official aviation weather observation station reported 4 miles visibility, mist, in addition to a broken ceiling at 400 ft, and an overcast ceiling at 1,000 ft. An upper air sounding displayed the potential for cloud formation between 600 to 3,250 ft. Weather satellite imagery of the accident site showed cloud cover above the accident site and to the north and west. At the time of the accident, the clouds were moving south to north. AIRMET Sierra, issued at 0845, forecast instrument meteorological conditions with mist and fog through 1500 near the accident site.

The pilot did not receive a weather briefing from Leidos Flight Service or ForeFlight.

After the accident, a US Coast Guard (USCG) helicopter was launched to the scene to provide search and rescue support. The USCG pilot reported that the weather was visual flight rules (VFR) at Louis Armstrong International Airport (MSY), New Orleans, Louisiana, but deteriorated to marginal VFR and instrument flight rules to the west. Because of low-level fog, the stanchions of the power lines were “barely visible” from the east; from the west, the fog layer was above the power lines with high cloud layers that reached about 1,200 ft. The USCG pilot also reported that, from a top-down view, “there was very dense fog from all areas with a tall column of clouds to the west of the power line intersection” where the accident occurred. The USCG pilot stated that the helicopter orbited with good visibility at 500 ft over the shoreline but that, on land to the west, a “wall of clouds” to 1,200 ft was present.

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	On-ground
Total Injuries:	1 Fatal	Latitude, Longitude:	30.076082,-90.402543(est)

The helicopter impacted the highway on a trestle bridge in a steep nose-low attitude. The main rotor blades, mast, and transmission separated from the fuselage and fell into Lake Pontchartrain. The postimpact fire consumed most of the fuselage.

Postaccident examination of the wreckage revealed markings on two main rotor blades that were consistent with contact with a braided metal wire. No anomalies were found with the airframe or engine that would have precluded normal operation of the helicopter.

Administrative Information

Investigator In Charge (IIC):	Aguilera, Jason
Additional Participating Persons:	Richard Gordon; FAA FSDO; Baton Rouge, LA Nick Shepler; Rolls-Royce; Indianapolis, IN Beverly Harvey; Canada TSB; Ottawa , OF
Original Publish Date:	July 6, 2023
Last Revision Date:	
Investigation Class:	Class 3
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=104406

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](#).