



Aviation Investigation Final Report

Location:	Crowley, Louisiana	Accident Number:	CEN13FA009
Date & Time:	October 10, 2012, 11:55 Local	Registration:	N333DR
Aircraft:	Bell 206B	Aircraft Damage:	Substantial
Defining Event:	Controlled flight into terr/obj (CFIT)	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

A witness, who was performing maintenance on a broadcast tower, observed a helicopter operating about 1/2 mile to the east, flying toward the broadcast tower. When the helicopter was about 60 feet from the tower, it banked to the left, away from the tower, and subsequently struck the number 4 guy-wire on the south side of the broadcast tower. After the helicopter struck the wire, it veered back to the right and descended to the ground. Postaccident examination of the helicopter, engine, and related systems revealed no 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 clearance from the broadcast tower guy-wires.

Findings

Aircraft	Altitude - Not attained/maintained
Personnel issues	Monitoring environment - Pilot
Environmental issues	Tower/antenna (incl guy wires) - Awareness of condition

Factual Information

History of Flight

Enroute	Controlled flight into terr/obj (CFIT) (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

HISTORY OF FLIGHT

On October 10, 2012, approximately 1155 central daylight time, a Bell 206B helicopter, N333DR, was substantially damaged when it impacted a guy-wire on a broadcast tower and then terrain, near Crowley, Louisiana. The private pilot was fatally injured. The helicopter was registered to Pintail Lodge Inc., and operated by a private individual under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed for the flight, which operated without a flight plan. The personal flight originated from Broussard, Louisiana, approximately 1135, and was en route to Beaumont, Texas.

According to a witness performing maintenance on the broadcast tower, he observed the helicopter ½ mile to the east, flying towards the tower. When the helicopter was approximately 60 feet from the broadcast tower, the helicopter banked to the left, as if to avoid hitting the tower and subsequently struck the number 4 guy-wire on the south side of the tower. After the helicopter struck the wire, the helicopter veered back to the right and descended to the ground. The witness did not observe or hear anything abnormal with the helicopter prior to the impact with the wire.

PERSONNEL INFORMATION

The pilot, age 66, held a private pilot certificate with airplane single and multiengine airplane, rotorcraft-helicopter, and instrument airplane ratings. He was issued a third class airman medical certificate on August 2, 2011. The certificate contained the limitation "Must have available glasses for near vision."

The pilot's flight logbook was not located. According to his last medical certificate application, the pilot reported 3,200 total flight hours; 30 of which had been logged in the previous six months. The date of the pilot's last flight review, experience in a Bell 206, and recent experience could not be determined.

AIRCRAFT INFORMATION

The accident helicopter, a Bell 206B (serial number 4340), was manufactured in 1995. It was registered with the Federal Aviation Administration (FAA) on a standard airworthiness certificate for normal operations. A Rolls Royce 250-C20J engine rated at 420 horsepower

powered the helicopter.

The helicopter was maintained under an annual inspection program. A review of the maintenance records indicated that an annual inspection had been completed on October 10, 2012, at an airframe total time of 1,343.8 hours.

METEOROLOGICAL INFORMATION

The closest official weather observation station was Le Gros Memorial Airport (K3R2), Crowley, Louisiana, located 7 nautical miles (nm) northeast of the accident site. The elevation of the weather observation station was 14 feet mean sea level (msl). The routine aviation weather report (METAR) for K3R2, issued at 1155, reported, wind 070 degrees at 3 knots, visibility 10 miles, sky condition clear, temperature 27 degrees Celsius (C), dew point temperature 20 degrees C, altimeter 30.15 inches.

At 1145, the sun was at 149 degrees azimuth and 49 degrees altitude.

WRECKAGE AND IMPACT INFORMATION

The accident site was located in open, flat terrain at an elevation of 8 feet msl. The debris extended from the tower on an approximate heading of west.

The aft portion of the tail boom was located in a crawfish pond between the tower and the main wreckage. The tail boom included the tail rotor gear box, the aft portion of the tail rotor drive shaft, the vertical fin, and the tail rotor. The inboard portion of both tail rotor blades remained attached and measured approximately 12 inches in length. The separation of the outboard portion of both blades was consistent with an impact with a cable. The tail rotor rotated without binding and rotation was observed in the tail rotor driveshaft to the point of separation. The tail rotor blades also pivoted correctly and movement was confirmed through the anti-torque tube. The vertical fin was unremarkable.

The right cabin door was located approximately 50 feet to the north of the aft portion of the tail boom. The Plexiglas was broken and the door was otherwise unremarkable.

The main rotor assembly was located in the same crawfish pond to the south of the aft portion of the tail boom. The main rotor consists of two blades which are labeled either white or red for identification purposes. Both remained attached at the main rotor hub.

The white blade was 12 feet in length. Approximately three feet outboard from the hub the blade was partially separated into two pieces. The outboard leading edge of the white blade exhibited paint transfer, red in color. The blade was bent in several locations. The red blade was 16 feet in length. An eight foot section of the center section of the red blade separated and was fragmented. The blade was bent in several locations and the leading edge was unremarkable. The outboard most portion of the main rotor mast separated from the

remainder of the driveshaft in overload. Both balance weights remained attached.

The main wreckage was located west of the tower, on a service road between two crawfish ponds. The main wreckage included the cabin, instrument panel, engine and transmission assembly, both landing skids, and a portion of the tail boom from the transition area aft to the horizontal stabilizer, and then further aft an additional 47 inches. The wreckage came to rest inverted oriented on an approximate heading of 240 degrees.

Both skids were crushed up into the fuselage; broken, and fragmented. The upper portion of the fuselage was crushed down, broken, and fragmented. The cabin area was crushed, reducing the occupiable space, and the instrument panel was crushed and broken. A tear initiated on the right side of the helicopter near the pilot chin bubble and continued aft at a 45 degree angle for 30 inches. The anti-torque pedals separated and were found to the west of the main wreckage. The tear in the lower fuselage and along the anti-torque pedals was consistent with a cable strike.

Flight control continuity was confirmed. The collective separated from the airframe where the mixing unit jack screw was located. The mixing unit was damaged in overload, and the cyclic was impact damaged.

Both front seats were broken and partially separated from the airframe. The right and left sides of the fuselage were crushed and wrinkled and all cabin doors had separated and were located in the debris field.

The right horizontal stabilizer was unremarkable. The left horizontal stabilizer was crushed in at the outboard edge of the control and had dirt and grass imbedded in the edge and along the position light cover. The damage to the tail boom at the separation point was consistent with a cable strike. There was red paint transfer, rubbing, and grey witness marks along the top and sides of the skin. The bottom portion of the tail boom had a witness mark that was fairly wide and uneven, consistent with the braiding of a cable.

MEDICAL AND PATHOLOGICAL INFORMATION

The autopsy was performed by the Calcasieu Parish Coroner's Office on October 11, 2012, as requested by the Acadia Parish Coroner's office. The autopsy concluded that the cause of death was multiple injuries sustained in the helicopter accident, and the report listed the specific injuries.

During the autopsy, specimens were collected for toxicological testing to be performed by the FAA's Civil Aerospace Medical Institute, Oklahoma City, Oklahoma (CAMI Reference Number 201200257001). Testing of the urine revealed 0.027 ug/ml Oxazepam. Oxazepam is a tranquilizer used in the treatment of anxiety disorders and is a metabolite of Diazepam, Nordiazepam, and Temazepam.

ADDITIONAL INFORMATION

The broadcast tower was registered as KQIS FM tower No. 1061295. The tower was painted red and white, with each painted section being 100 feet in length with 11 different sections. The tower was secured to the ground by three sets of guy wires. According to the most recent sectional aeronautical chart, the broadcast tower was accurately depicted at an altitude of 1,066 feet msl. The broadcast tower was properly marked based upon the guidance outlined in the FAA Advisory Circular 70/7460-1K and the requirements found in the Federal Communications Commission Regulation 47 CFR §§ 17.21-17.50.

Pilot Information

Certificate:	Private	Age:	66, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	August 2, 2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	3200 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N333DR
Model/Series:	206B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	4340
Landing Gear Type:	Skid	Seats:	5
Date/Type of Last Inspection:	October 10, 2012 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	1343.8 Hrs as of last inspection	Engine Manufacturer:	Rolls Royce
ELT:	Not installed	Engine Model/Series:	250-C20J
Registered Owner:	On file	Rated Power:	420 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	K3R2, 14 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	11:55 Local	Direction from Accident Site:	310°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.14 inches Hg	Temperature/Dew Point:	27°C / 20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Broussard, LA	Type of Flight Plan Filed:	None
Destination:	Beaumont, TX	Type of Clearance:	None
Departure Time:	11:35 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	30.085277,-92.382499

Administrative Information

Investigator In Charge (IIC): Rodi, Jennifer

Additional Participating Persons: Todd Miller; FAA Flight Standards District Office; Baton Rouge, LA
William Sarles; Bell Helicopter; Dallas, TX
Jack Johnson; Rolls Royce; Indianapolis, IN

Original Publish Date: June 12, 2013

Last Revision Date:

Investigation Class: [Class](#)

Note: The NTSB traveled to the scene of this accident.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=85294>

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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](#).