





Aviation Investigation Final Report

Location: Pratt, Kansas Accident Number: CEN23LA237

Date & Time: June 11, 2023, 14:06 Local Registration: N85RB

Aircraft: Bell 206B Aircraft Damage: Substantial

Defining Event: Fuel exhaustion **Injuries:** 2 Minor

Flight Conducted Under: Part 91: General aviation - Aerial observation

Analysis

The pilot and a camera operator were conducting aerial pipeline surveillance at the time of the accident. At the initial planned fuel stop, the self-service Jet A fuel pump did not operate properly, and the pilot was unable to obtain any assistance from the airport. With over "half a tank of fuel", the pilot decided to depart and conduct some additional pipeline surveillance en route to an alternate fuel stop. However, Jet A fuel was not available at the alternate fuel stop. Efforts to find assistance also were not successful. The nearest airport with Jet A fuel was approximately 40 miles away, and about 15 gallons of fuel remained onboard the helicopter. The pilot elected to proceed 15 to 20 miles and land next to a road in an effort to reach cellphone coverage or find a passing vehicle to request assistance. After clearing a windmill farm the pilot began an approach for landing near a road about 6 miles from the intended destination airport. About 100 ft above ground level, "the engine flamed out due to lack of fuel." The pilot entered an autorotation and subsequently impacted an agricultural field. The aft cabin and lower portion of the aft fuselage sustained substantial damage. The landing skids and aft portion of the tail boom were separated. Neither the pilot nor the operator reported any mechanical failures or malfunctions associated with 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:

Fuel exhaustion due to the pilot's inadequate preflight planning.

Findings

Aircraft	Fuel - Fluid management
Personnel issues	Fuel planning - Pilot

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Factual Information

History of Flight

Approach	Fuel exhaustion (Defining event)	
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Pilot Information

Certificate:	Commercial	Age:	38,Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	June 8, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2300 hours (Total, all aircraft), 800 hours (Total, this make and model), 1800 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N85RB
Model/Series:	206B	Aircraft Category:	Helicopter
Year of Manufacture:	1972	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	831
Landing Gear Type:	High skid	Seats:	5
Date/Type of Last Inspection:	May 27, 2023 100 hour	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	22057 Hrs as of last inspection	Engine Manufacturer:	Rolls-Royce
ELT:	Installed	Engine Model/Series:	250-C20
Registered Owner:	On file	Rated Power:	420 Horsepower
Operator:	On file	Operating Certificate(s) Held:	Rotorcraft external load (133)
Operator Does Business As:	On file	Operator Designator Code:	N/A

Meteorological Information and Flight Plan

meteorological informati	<u> </u>		
Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KPTT,1952 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	14:15 Local	Direction from Accident Site:	41°
Lowest Cloud Condition:	Scattered / 2900 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 6500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	13 knots / 0 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	25°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Coldwater, KS (3K8)	Type of Flight Plan Filed:	Company VFR
Destination:	Pratt, KS (PTT)	Type of Clearance:	None
Departure Time:	13:35 Local	Type of Airspace:	Class G

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Airport Information

Airport:	Pratt Regional PTT	Runway Surface Type:	
Airport Elevation:	1953 ft msl	Runway Surface Condition:	Dry;Vegetation
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	37.621944,-98.834278(est)

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Administrative Information

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	Robert Nash; FAA Flight Standards; Wichita, KS
Original Publish Date:	July 27, 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=192358

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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