Aviation Investigation Final Report

Location:	Croydon, New Hampshire	**Accident Number:**	ERA24FA003
Date & Time:	October 8, 2023, 19:32 Local	**Registration:**	N802JR
Aircraft:	BELL HELICOPTER TEXTRON CANADA 407	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control in flight	**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Positioning		

Analysis

The accident flight, a night visual flight rules positioning flight, originated at an off-airport landing site the pilot had landed the helicopter at two days before the accident. An onboard image recorder captured the accident flight, which was the first flight of the day for the pilot. The video revealed that after a normal preflight inspection and run-up, the pilot initiated a near-vertical (straight-up) takeoff. Shortly after takeoff, the pilot stated aloud that it was too dark, and the helicopter began flying in an uncoordinated manor.

The pilot continued the climb and accelerated forward, and the helicopter entered multiple unusual attitudes, with the primary flight display (PFD) indicating that the helicopter was in an extreme nose-down, right-bank attitude. The PFD displayed multiple visual warnings prompting the pilot to correct the unusual attitude. The pilot made large cyclic applications during the maneuvers, continued to verbally express confusion, and the engine torque/power was increased to its maximum. The helicopter then entered a descending right turn for 15-20 seconds. Shortly before impact, an aural alert for terrain was sounded, red chevrons on the PFD continued to display, and the helicopter's spotlight began illuminating the dark forest below. The video stopped recording about one second after trees were observed in the pilot's windscreen.

Postaccident examination of the helicopter revealed no evidence of preimpact mechanical malfunctions or failures that would have precluded normal operation.

Based upon the flight track data, onboard image recorder data, and astronomical data, the pilot initiated a visual flight rules flight into dark nighttime conditions over featureless terrain, which likely prevented the pilot from using visual references to the horizon. The pilot's expressed confusion and large cyclic applications were likely the result of the pilot experiencing spatial disorientation.

The onboard image recorder captured the pilot increasing the instrumentation and display lighting during the preflight inspection and he did not dim the instrumentation lighting before or during flight. Guidance from the FAA Helicopter Flying Handbook advises pilots to dim cockpit lighting for night operations to better identify outside terrain and hazard details. The guidance further outlined that taking off with cockpit lights that are too bright could cause reflections or glare off the windscreen, further reducing a pilot's ability to fly by reference to the horizon outside. The pilot's cockpit lighting settings likely contributed to the spatial disorientation.

The pilot had available for his use an autopilot and stability augmentation system (HeliSAS) to help prevent the helicopter from entering unusual attitudes, in addition to helping the pilot exit an unusual attitude; however, the SAS mode was not engaged and remained in a standby mode for the entire flight. The SAS could have been engaged at the airspeed and altitudes through which the pilot was flying during accident flight.

Review of the pilot's experience found that an overwhelming majority of the pilot's flight experience in the last 12 months was during daylight. Although, the operator did not record, nor where they required to record night currency, the pilot's actions regarding lighting settings, his statement that it was "too dark," and the ultimate loss of control due to spatial disorientation, likely indicate the pilot was not sufficiently current/proficient to fly the helicopter at night.

The pilot had atherosclerotic and hypertensive cardiovascular disease that placed him at increased risk of a sudden impairing or incapacitating cardiovascular event. However, video evidence was not consistent with such an event occurring. Thus, it is unlikely that the pilot's medical conditions contributed to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's loss of control during the initial climb in dark night conditions due to spatial disorientation, which resulted in a steep banking descent into trees and terrain. Contributing to the accident was the pilot's lack of recent night flight experience, improper cockpit lighting settings, and his failure to use the helicopter's stability augmentation system before and during the unusual attitude.

Findings

Personnel issues	Spatial disorientation - Pilot
Personnel issues	Aircraft control - Pilot
Personnel issues	Recent experience - Pilot
Aircraft	(general) - Not attained/maintained
Environmental issues	Dark - Response/compensation
Aircraft	Flight compartment lighting - Incorrect use/operation
Aircraft	(general) - Not used/operated

Factual Information

History of Flight

Initial climb	Loss of visual reference
Initial climb	Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

HISTORY OF FLIGHT

On October 8, 2023, about 1932 eastern daylight time, a Bell 407 helicopter, N802JR, was involved in an accident near Croydon, New Hampshire. The commercial pilot was fatally injured. The helicopter was operated by JBI Helicopter Services under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a positioning flight.

According to the operator, on October 6, 2023, the accident pilot, in the accident helicopter, was conducting visual powerline patrols in the region of the accident site. Due to poor weather at the operator's base near Pembroke, New Hampshire, the pilot elected to land on private property that had a large field and was known to company pilots as a safe area to land should weather prevent their return to base. The pilot was then picked up by car and ended his shift later that afternoon.

The accident pilot did not have any scheduled flights for October 7th and was off duty most of the day on October 8th. On the day of the accident, about 1700, management personnel from the operator contacted the accident pilot and detailed an aerial photo mission to be conducted the following day at Quonset State Airport (OQU), North Kingstown, Rhode Island.

The accident flight was to be a positioning flight from the off-airport landing site the pilot had landed at on October 6th to OQU, about 115 miles south. According to a family member of the pilot, on the day of the accident, he played golf with friends and planned to reposition the helicopter after golf.

Data recovered from an Appareo Vision 1000 Airborne Image Recording System showed that the helicopter took off about 1931, climbed vertically to about 500 ft above ground level (agl), and began flying northeast. About 30 seconds of flight data was recorded, which showed that the helicopter climbed northeast about 600-700 ft agl. The helicopter then turned east and eventually southeast, and as the helicopter turned, it began descending while its ground speed gradually increased. The helicopter subsequently impacted trees and terrain about 600 ft southeast of the helicopter's last recorded position (see Figure 1).

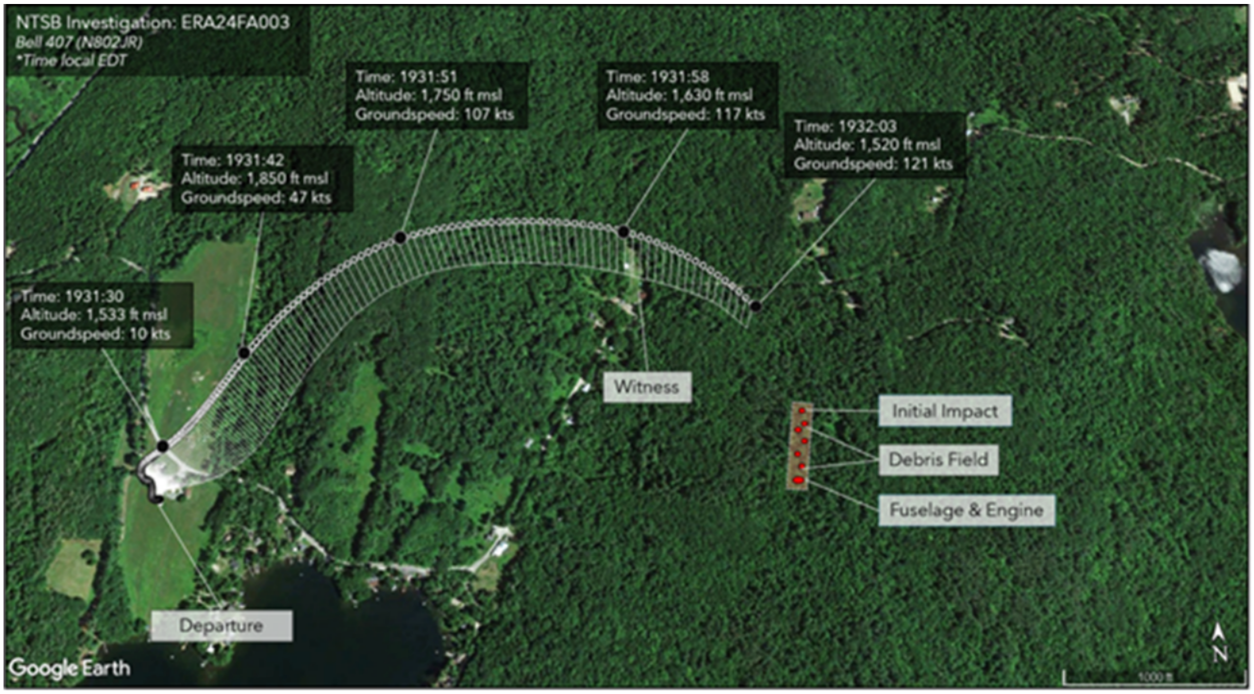

Figure 1 - Overview of the flight information and wreckage location.

A witness under the helicopter's flight path heard the helicopter flying over her house and immediately went outside. She saw the helicopter with its lights on and described the engine as being "very loud." The helicopter disappeared from her view and the sound of the helicopter abruptly stopped, but she did not hear an impact.

Shortly after the accident occurred, company personnel from the operator noticed that the helicopter was no longer broadcasting a position, and they immediately initiated a search and notified local authorities. The wreckage was located about 0200 on October 9, 2023.

A download of the onboard image recorder revealed that the helicopter was powered on at 1919:35 and the pilot conducted preflight activities in the cockpit. The HeliSAS Stability Augmentation System (SAS) was observed to be illuminating white (stand-by mode) on the HeliSAS Control Panel (HCP). The pilot increased the brightness on the instrument panel and instrument gauges before starting the engine, and did not make any further lighting adjustments for the remainder of flight. The pilot was also observed to enter a waypoint in the GPS for OQU.

At 1925:04, the pilot briefly exited the helicopter for a few minutes, re-entered, put on his helmet and started the helicopter.

At 1929:23, the pilot completed a run-up and the engine warning light on the annunciator panel extinguished.

At 1930:46 the helicopter entered a hover and took off. The standby altimeter indicated 1,700 ft at takeoff.

Note that the following altitudes are referenced from the indicated standby altimeter altitude. The primary flight display (PFD) altitude could not be viewed due to video blurring. The field elevation was about 1,110 ft mean sea level.

At 1931:18, the altitude was about 1,850 ft, the trim ball indicated full left deflection, and the pilot stated, “Ah [expletive], it’s too dark.”

At 1931:42, the altitude had increased to 2,450 ft, airspeed was 20 knots, and red chevrons appeared on the primary flight display (PFD), indicating an extreme nose down attitude. At this time the pilot stated, “Ah[expletive], [pilot’s name].” At 1931:46, the pilot stated, “What am I doing?”

At 1931:49, the altitude was 2,400 ft, the airspeed increased to 70 knots, and a double red chevron on the PFD was indicating an extreme nose down attitude, which appeared for about 3 seconds. The helicopter appeared to be in uncoordinated flight with full right needle deflection and full left ball. Large rapid cyclic movements were observed, predominately forward and right cyclic inputs, which were followed by two full left cyclic inputs. About two seconds later, the terrain warning inset appeared on the multi-function display (MFD).

At 1931:53, the annunciator voice said, “warning terrain terrain.” This announcement was heard 3 additional times until the end of the recording. At 1931:57, the ’Check Instrument’ annunciator illuminated for about 3 seconds, which coincided with the engine torque gauge and segmented Trend ARC flashing on and off. These indications were consistent with an engine power exceedance that was about to occur.

At 1932:00, the pilot momentarily reached across his body towards the Garmin 696, which appeared to be the brightest of all of the displays. A few seconds later, altitude decreased to 2,100 ft and the airspeed increased to 120 knots. A red chevron again appeared, indicating an extreme nose-down attitude. The helicopter appeared to be in uncoordinated flight, in an extreme right bank, with full right needle deflection and full left ball. The engine torque gauge appeared to be near its maximum and large cyclic movements continued to be observed.

At 1932:04 the altitude was 2,050 ft and the airspeed increased to 125 knots. The red chevron remained on the PFD, the helicopter remained in uncoordinated flight in an extreme right bank, with full left ball, and large cyclic movements continued. The engine torque gauge flashed on and off, and the Check Instrument light illuminated a second time and remained illuminated for the remainder of flight.

At 1932:06, the gauges blurred in the video, and trees began to be illuminated by the helicopter’s spot light in the pilot’s windscreen. The altitude was 1,900 ft and the airspeed was 125 knots. The video ended one second later.

PILOT INFORMATION

According to FAA airman records, the commercial pilot held ratings for airplane single-engine land and sea, in addition to multi-engine land. He also held ratings for rotorcraft helicopter, as well as instrument airplane and helicopter. He held a flight instructor certificate, with ratings for airplane single- and multi-engine, and rotorcraft helicopter. On October 19, 2022, he was issued a second-class medical certificate, with an interim issuance denoting it was not valid for any class after October 31, 2023.

Review of 12 months of the operator's flight hour history for the pilot found that he primarily flew during daylight conditions. The operator was not tracking night currency, nor was there any requirement for the pilot to possess recent night experience as outlined in § 61.57(b) Recent flight experience: Pilot in command, given the flight was a Part 91 single-pilot positioning flight.

The pilot completed his most recent Part 135.293 and 135.299 airman competency/proficiency check on March 22, 2023. The check was satisfactory. The remarks noted that the following conditions and procedures were evaluated: flat light, white out/brown out, RNAV 17 KCON Airport, IMC, unusual attitude recovery, hydraulic off, and FADEC Fail. Operator records showed that the pilot completed his initial airman/competency check in the accident helicopter on April 6, 2016.

The operator's check pilot who completed the most recent Part 135 proficiency check with the pilot explained that the evaluation of the white out and brown out conditions was a verbal discussion during preflight, given the inherent danger in those conditions. He said the pilot satisfactorily explained a description of what he would do under white out or brown out conditions.

The check pilot reported that unusual attitude recoveries were evaluated. He placed the helicopter in an unusual attitude and transferred controls back to the pilot, who recovered satisfactorily. He recalled that the pilot did not use the HeliSAS system, and the recovery was made in visual meteorological conditions without any vision reducing equipment (i.e., the pilot was not wearing a view limiting device, nor was he required to be). The check pilot further explained that for proficiency checks, all equipment on-board must be airworthy, but it is up to the pilot as to what equipment they choose to use during the flight (e.g., autopilot, HeliSAS equipment, etc.).

The check pilot was asked to explain his knowledge and experience with the HeliSAS, given his experience in the accident helicopter. He explained that there are two ways to engage the HeliSAS, either on the cyclic via a button, or on the autopilot mode control panel. He explained that engaging the system will level the helicopter from an unusual attitude. He explained that it works like an airplane wings leveler button. He explained that he has experience using the SAS feature, and he knows other pilots that have used it as well. The check pilot did not observe the accident pilot using the HeliSAS feature in their checkride. However, he noted that records indicated the pilot satisfactorily used the autopilot during his initial Bell 407 checkride in 2016.

According to the president of JBI Helicopters, the accident pilot had trained other company pilots on the use of HeliSAS and was well educated on how/when to use this feature. He was not certain as to why the pilot did not activate the system at the time of the accident.

HELICOPTER INFORMATION

Aircraft logbooks and records were reviewed, and no anomalies were observed with their manufacturer inspection program. The helicopter was equipped with an onboard image recorder, an Appareo Vision 1000. The Appareo Vision 1000 is a self-contained image, audio, and data recorder. The device was mounted in the overhead panel in the cockpit. It recorded an image at a rate of four times per second with its internal camera. A GPS receiver received satellite-based aircraft time, position, altitude, and speed. The device had a self-contained real-time inertial measuring unit that recorded 3-axis acceleration, and derived pitch, roll and yaw data. The operator was not required to install the image recorder.

The unit recorded data, audio, and images during the accident flight and a group was assembled to review and transcribe its contents. Refer to the National Transportation Safety Board public docket for the onboard image recorder specialist's report detailing the findings.

The helicopter was equipped with a S-TEC HeliSAS/Autopilot System in accordance with supplemental type certificate No. SR02344LA. The flight manual supplement stated in part that HeliSAS was a two-axis (pitch & roll) stability augmentation system (SAS) with autopilot. The attitude-command-attitude-hold SAS mode of the HeliSAS maintains helicopter attitude in all flight conditions by applying corrective inputs to the cyclic to maintain the commanded or reference attitude. The flight manual supplement further stated:

The SAS system could be selected ON or OFF with a push button located in the cockpit and on the autopilot.

The figures below provide an exemplar view and accident helicopter view of the HeliSAS Control Panel (HCP) that is incorporated with the autopilot. The exemplar HCP panel below reflects a SAS "green" status indicating SAS is engaged. A white light above the SAS selection button indicates that the mode is not engaged and is in a standby mode ready to be engaged. In the exemplar photo, the HCP also has an engaged altitude (ALT) mode on.

Figure 2: Exemplar HeliSAS Control Panel (HCP)

Figure 3: View of the accident helicopter HCP.

The flight supplement provided normal procedures for the SAS Mode. The supplement stated in part:

Observe that SAS ON/OFF button is solid amber, or the SAS LED on HCP is white, indicating that SAS is in standby mode.

SAS may be engaged prior to liftoff, throughout landing, and at any airspeed.

Engage SAS by pressing SAS button (on instrument panel or HCP) or holding FTR button on cyclic for at least 1.25 seconds.

SAS may be disengaged by pressing SAS button (on instrument panel or HCP) or AP DISC button on cyclic.

If autopilot modes are engaged, the AP DISC button must be pressed twice or held for at least 1.25 seconds to disengage SAS.

Safety monitors automatically disengage the SAS/autopilot if a malfunction is detected. Automatic disengagement of an autopilot mode while the SAS remains functional is indicated by a single beep in the headset. Automatic or intentional disengagement of the entire system is indicated by four beeps in the headset.

The supplement provided normal operation overview for the SAS. The supplement stated in part:

Normal Operation

The SAS performs a self-test and enters standby mode during aircraft start and warm-up. Standby mode is indicated by annunciation of the white LED light above the SAS mode button on the HCP. The HCP mode LEDs alternate between white and green during power-up and self-test. An aural warning test (four headset beeps) is part of the self-test.

Once the system is in standby mode and while still on the ground and wearing the headset, the system should be engaged with cyclic friction off. The cyclic should exhibit a centering tendency. Disengage the system using the AP DISC button on the cyclic and note 4 beeps in the headset. Note that the cyclic forces are nearly zero with the system disengaged.

HeliSAS is intended to be active or in standby mode at all times. This is to ensure that the SAS can be quickly engaged if needed.

HeliSAS may be engaged at pilot's discretion using the HCP SAS mode button. A white OFF indication turns to green ON when the system is engaged. If the HCP is installed, HeliSAS may be engaged at the pilot's discretion using the HCP SAS mode button. A white indication on the SAS LED turns green when the system is engaged. The SAS may also be engaged by pressing the force-trim-release (FTR) button on the cyclic grip for more than 1.25 seconds.

Additional autopilot modes may be engaged using the other HCP mode buttons (if installed), but only when indicated airspeed is greater than 44 KIAS.

The SAS may be used throughout the flight envelope (including hover and autorotation) at pilot's discretion.

When the SAS is engaged while airborne, it will maintain the pitch and roll attitude at the time of engagement within the following limits. The system will not trim to pitch attitudes greater than 6 degrees nose-down, 11 degrees nose-up, and 5 degrees bank. If the system is engaged with the helicopter in a large pitch or roll attitude, it will fly the helicopter to a nearly level attitude. After SAS engagement, the reference attitude may be adjusted using the FTR button on the cyclic grip. The system will maintain the attitude at which the trim button is released, within the above limits.

NOTE

The SAS should always be in standby mode when it is not engaged. This allows immediate engagement if required.

Review of the onboard image recorder found that during the takeoff and initial climb, the SAS system was not activated and remained in a white standby mode throughout the flight.

METEOROLOGICAL INFORMATION

The United States Naval Observatory's website provided data outlining the astronomical conditions over the accident site. At the time of the accident the sun was 14.38° below the horizon at an azimuth of 275°. The moon was also more than 23° below the horizon at an azimuth of 342°, with the phase of the moon a waning crescent with 27.8% of the moon's visible disk illuminated when above the horizon.

The National Weather Service Regional Composite Reflectivity image for 1930 depicted an area of light reflectivity between 10 and 35 dBZ about 2 miles south of the accident site. There was no precipitation identified along the accident route of flight.

The witness who observed the accident helicopter recalled seeing the stars after the helicopter flew by. She could not recall seeing the moon and described the night as a “dark night.” There was no wind, nor any rain or clouds that she observed.

WRECKAGE INFORMATION

The wreckage debris path was oriented on a southerly heading of about 193° and spanned about 485 ft from the initial impact point to the co-located fuselage and engine. The initial impact point coincided with a pine tree that was about 100 ft tall. A strong odor of fuel was present at the accident site. All major components of the helicopter were in the debris field and portions of the helicopter were heavily fragmented along the wreckage path.

Examination of the airframe and engine revealed no evidence of preimpact mechanical malfunctions or failures that would have precluded normal operation.

The engine’s electronic control unit (ECU) was downloaded. The data revealed that the engine was producing high power (at or near 100%) throughout the flight.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy performed by the Office of the Chief Medical Examiner, Concord, New Hampshire, found that the cause of death was multiple blunt impact injuries, and the manner of death was an accident. At the time of the autopsy, atherosclerotic and hypertensive cardiovascular disease was identified, including moderate-to-marked coronary artery disease with prior coronary artery bypass grafts (CABG), an enlarged heart with dilatation of both ventricles and thickening of the left ventricular wall, and mild-to-moderate kidney tissue changes of the kind commonly seen with chronic high blood pressure. No other significant natural disease was identified. The pilot reported his heart condition/CABG procedure to the FAA at his medical exam and the FAA issued a waiver.

Toxicology testing was negative for carboxyhemoglobin and ethanol. The testing was positive for acetaminophen, rosuvastatin, and metoprolol. Acetaminophen is a medication available in a wide variety of over-the-counter products as a pain and fever reducer. Rosuvastatin is a prescription medication commonly used to control cholesterol and reduce cardiovascular risk. Metoprolol is a prescription medication that can be used as part of treatment for high blood pressure, certain arrhythmias, and certain types of heart failure. Acetaminophen, rosuvastatin, and metoprolol are not generally considered impairing.

ADDITIONAL INFORMATION

The FAA Helicopter Flying Handbook, Chapter 12, Night Operations, provided the following guidance on night vision and cockpit lighting practices:

Visual Deficiencies

Night Myopia

At night, blue wavelengths of light prevail in the visible portion of the spectrum. Therefore, slightly nearsighted (myopic) individuals viewing blue-green light at night may experience blurred vision. Even pilots with perfect vision find that image sharpness decreases as pupil diameter increases. For individuals with mild refractive errors, these factors combine to make vision unacceptably blurred unless they wear corrective glasses. Another factor to consider is "dark focus." When light levels decrease, the focusing mechanism of the eye may move toward a resting position and make the eye more myopic. These factors become important when pilots rely on terrain features during unaided night flights. Practicing good light discipline is very important and helps pilots to retain their night adaptation. Keeping the cockpit lighting on dim allows the pilot to better identify outside details, unmarked hazards such as towers less than 200' AGL, and unimproved landing sites with no hazard lighting.

Cockpit Lights

Check all interior lights with special attention to the instrument and panel lights. The panel lighting can usually be controlled with a rheostat or dimmer switch, allowing the pilot to adjust the intensity. If a particular light is too bright or causes reflection or glare off the windshield, it should be adjusted or turned off. As ambient light level decreases from twilight to darkness, intensity of the cockpit lights is reduced to a low, usable intensity level that reduces any glare or reflection off the windshield. The light level should be adjusted to as close to the ambient light level as possible.

The FAA Civil Aerospace Institute's publication, "Introduction to Aviation Physiology," defines spatial disorientation as a loss of proper bearings or a state of mental confusion as to position, location, or movement relative to the position of the earth. Factors contributing to spatial disorientation include changes in acceleration, flight in instrument meteorological conditions (IMC), frequent transfer between visual meteorological conditions (VMC) and IMC, and unperceived changes in aircraft attitude.

The FAA's Airplane Flying Handbook (FAA-H-8083-3A) describes some hazards associated with flying when the ground or horizon are obscured. The handbook states, in part: The vestibular sense (motion sensing by the inner ear) in particular tends to confuse the pilot. Because of inertia, the sensory areas of the inner ear cannot detect slight changes in the attitude of the airplane, nor can they accurately sense attitude changes that occur at a uniform rate over a period of time. On the other hand, false sensations are often generated, leading the pilot to believe the attitude of the airplane has changed when in fact, it has not. These false sensations result in the pilot experiencing spatial disorientation.

Pilot Information

Certificate:	Commercial	**Age:**	73,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	4-point
Instrument Rating(s):	Airplane; Helicopter	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 Unknown	**Last FAA Medical Exam:**	October 19, 2022
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	March 22, 2023
Flight Time:	(Estimated) 13780 hours (Total, all aircraft), 1377 hours (Total, this make and model), 13699 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL HELICOPTER TEXTRON CANADA	**Registration:**	N802JR
Model/Series:	407 NO SERIES	**Aircraft Category:**	Helicopter
Year of Manufacture:	2009	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	53971
Landing Gear Type:	Skid	**Seats:**	8
Date/Type of Last Inspection:	September 25, 2023 Continuous airworthiness	**Certified Max Gross Wt.:**	6000 lbs
Time Since Last Inspection:	22 Hrs	**Engines:**	1 Turbo shaft
Airframe Total Time:	2990 Hrs at time of accident	**Engine Manufacturer:**	Rolls-Royce
ELT:	C126 installed, not activated	**Engine Model/Series:**	250-C47B
Registered Owner:	SHARKEYS HELICOPTERS INC	**Rated Power:**	
Operator:	On file	**Operating Certificate(s) Held:**	Rotorcraft external load (133), On-demand air taxi (135), Agricultural aircraft (137)
Operator Does Business As:	JBI Helicopters	**Operator Designator Code:**	FTYA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Night/dark
Observation Facility, Elevation:	VSF,568 ft msl	**Distance from Accident Site:**	18 Nautical Miles
Observation Time:	19:54 Local	**Direction from Accident Site:**	249°
Lowest Cloud Condition:	Scattered / 5500 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Overcast / 9500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots / None	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:	180°	**Turbulence Severity Forecast/Actual:**	N/A / N/A
Altimeter Setting:	29.6 inches Hg	**Temperature/Dew Point:**	10°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Croydon, NH (NONE)	**Type of Flight Plan Filed:**	Company VFR
Destination:	North Kingstown, RI (OQU)	**Type of Clearance:**	None
Departure Time:	19:31 Local	**Type of Airspace:**	Class G

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:**	43.450516,-72.132165

Administrative Information

Investigator In Charge (IIC):	Read, Leah
Additional Participating Persons:	Matthew Hall; FAA/FSDO; Portland, ME Nora Vallee; Transportation Safety Board of Canada; Gatineau , OF Gary Howe; Bell; Forth Worth, TX Jack Johnson; Rolls-Royce; Indianapolis, IN Kurt West; JBI Helicopter Services; Pembroke, NH
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Last Revision Date:	
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