

# National Transportation Safety Board Aviation Accident Preliminary Report

Location: Louisburg, NC Accident Number: ERA19FA113

**Date & Time:** 03/01/2019, 1921 EST **Registration:** N26617

Aircraft: Cessna 182 Injuries: 3 Fatal

Flight Conducted Under: Part 91: General Aviation - Personal

On March 1, 2019, at 1921 eastern standard time, a Cessna 182S, N26617, was destroyed when it collided with terrain after takeoff from Triangle North Executive Airport (LHZ), Louisburg, North Carolina. The private pilot and two passengers were fatally injured. Night instrument meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed for the personal flight which was conducted under the provisions of Title 14 *Code of Federal Regulations* Part 91.

Preliminary information obtained from the Federal Aviation Administration (FAA) and a commercial vendor revealed that the pilot obtained a weather briefing and filed an IFR flight plan through commercial on-line sites and obtained his IFR clearance by telephone prior to departure.

The clearance provided to the pilot instructed him to establish a heading of 180° and climb to 3,000 ft msl after takeoff from runway 23, which was at 367 ft elevation. Subsequently, a target identified as the accident airplane was first acquired at 19:20:03 over the runway at 425 ft msl at 91 knots groundspeed. The airplane maintained an approximate runway heading until 19:20:56, when at 1,225 ft and 99 knots, the airplane entered a right turn . At 19:21:03, the airplane reached the top of its climb in the turn at 1,300 ft and 100 knots groundspeed. From that point, the airplane entered a descending right turn and accelerated to 145 knots groundspeed before the target was lost at an altitude of 625 ft at 19:21:17.

Interpolation of preliminary radar data near the bottom of the descent revealed an approximate descent rate of 6,000 ft per minute. Communication between the airplane and air traffic control was never established.

Two airport employees who witnessed the takeoff had passed through the security gate onto the ramp in separate cars at 1912 to park one car in a hangar and depart the airport in the second car. While there, their attention was drawn to the sound of the airplane.

The airplane's engine was heard to "power up" which surprised the two, because they had not noticed the airplane taxi past them, or heard it perform an engine run-up. The airplane's lights were not clearly visible, as they were obscured by fog and had a "halo" appearance. One witness

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described the weather conditions as "foggy in moderate rain," the other said, "low clouds and a lot of rain. Made you wonder: who would want to fly in this?"

The airplane accelerated, and the sound of the engine was smooth and continuous throughout the takeoff roll and the takeoff. The airplane disappeared behind a hangar about the same time it entered the clouds, approximately 200-300 ft above the runway.

Several witnesses who lived near the airport provided written statements. They said they heard the airplane as it "just took off," "low overhead" and that the engine accelerated like it "went in full throttle" when the sounds of impact were heard. One witness said the rainfall was so hard at the time of the accident that it disabled his satellite television signal.

In a telephone interview, one of the witnesses, a local fire chief, said he was outside his home near the accident site when his attention was drawn to the sound of the airplane, and he "was surprised the airplane was taking off in this weather." The engine sound was smooth and continuous, at high power, when the engine accelerated further, "...like [the airplane] was either trying to climb, or in a dive," and then the sound of impact was heard.

The airplane came to rest partially submerged on the southwest side of a creek about 1.5 miles beyond the departure end of runway 23. Several pieces of angularly cut wood were found below damaged treetops on the northeast bank of the creek.

The wreckage was destroyed by impact and displayed no evidence of pre- or post-impact fire. All major components were accounted for at the scene with the exception of the majority of the right-wing structure, which included the right flap and flap actuator. Engine control continuity was established from the instrument panel to the engine. Flight control continuity could not be confirmed due to multiple cable breaks and fractures. All breaks and fractures exhibited signatures consistent with overload failure.

The engine was separated from its mounts, but still attached by wires and cables. Two of the three propeller blades were recovered and exhibited similar twisting, bending, and chordwise scratching. One blade exhibited significant leading-edge gouging.

The engine crankshaft was rotated by hand at the propeller flange and powertrain continuity was confirmed through the accessory section. Valvetrain continuity could not be confirmed due to impact-damaged pushrods. Internal borescope examination revealed signatures consistent with normal wear and lubrication. Both magnetos were intact in their mounts. When removed and tested, they each produced spark at all terminal leads.

The pilot held a private pilot certificate with ratings for airplane single engine land and instrument airplane. His FAA third class medical certificate was issued February 20, 2018, and he reported 1,270 total hours of flight experience on that date. On August 28, 2018, the pilot declared 1,422 total hours of flight experience an insurance application form.

According to FAA records, the airplane was owned by the pilot and manufactured in 1998. Its most recent annual inspection was completed November 12, 2018 at 3,757 total aircraft hours.

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At 1920, the weather recorded at LHZ included scattered clouds at 300 ft, a broken ceiling at 600 ft, an overcast ceiling at 1,100 ft and winds from 020° at 4 knots. Visibility was 5 statute miles in rain. The temperature was 4°C, and the dew point was 4°C. The altimeter setting was 29.94 inches of mercury.

An NTSB Senior Meteorologist performed a preliminary review of the weather conditions surrounding the accident site and the weather products provided to the pilot. At 1819, the pilot obtained an on-line weather briefing from the commercial vendor that included terminal area forecasts for low instrument flight rules conditions, AIRMETS for low-level wind shear, and a pilot report for severe turbulence along the airplane's proposed route of flight. According to the vendor, the pilot did not view "...any weather imagery prior to the flight."

#### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N26617
Model/Series:	182 S	Aircraft Category:	Airplane
Amateur Built:	No		
Operator:	On file	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night
Observation Facility, Elevation:	LHZ, 369 ft msl	Observation Time:	0020 UTC
Distance from Accident Site:		Temperature/Dew Point:	4°C / 4°C
Lowest Cloud Condition:	Scattered / 300 ft agl	Wind Speed/Gusts, Direction:	4 knots / , 20 $^{\circ}$
Lowest Ceiling:	Broken / 600 ft agl	Visibility:	5 Miles
Altimeter Setting:	30.08 inches Hg	Type of Flight Plan Filed:	IFR
Departure Point:	Louisburg, NC (LHZ)	Destination:	Hilton Head, NC (HXD)

#### Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Fatal	Latitude, Longitude: 3	36.001944, -78.354722 (est)

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### **Administrative Information**

Investigator In Charge (IIC):	Brian C Rayner
Additional Participating Persons:	Jeffrey Burch; FAA/FSDO; Greensboro, NC Peter Basile; Textron Aviation; Wichita, KS Mike Childers; Lycoming Engines; Williamsport, PA
Note:	The NTSB traveled to the scene of this accident.

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