National Transportation Safety Board
Aviation Accident Preliminary Report

Location:	Panama City, FL	**Accident Number:**	ERA22FA149
Date & Time:	March 8, 2022, 18:46 Local	**Registration:**	N182XT
Aircraft:	Cessna 182Q	**Injuries:**	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

On March 8, 2022, at 1846 central standard time, a Cessna 182Q airplane, N182XT, was destroyed when it was involved in an accident near the Northwest Florida Beaches International Airport (ECP), Panama City, Florida. The private pilot and passenger were fatally injured. The airplane was operated by the pilot as a personal flight conducted under the provisions of Title 14 *Code of Federal Regulations* Part 91.

Review of Automatic Dependent Surveillance – Broadcast (ADS-B) data provided by the Federal Aviation Administration (FAA) revealed that the pilot initiated an instrument flight rules (IFR) cross-country flight from his home airport of Jack Barstow Airport (IKW), Midland, Michigan at 1212 eastern standard time and arrived at Warren County Memorial Airport (RNC), McMinnville, Tennessee at 1503 central standard time for a total time enroute of 3 hours and 51 minutes. A fuel receipt showed that at 1520 the pilot purchased 74 gallons of 100-low lead fuel. The pilot departed at 1554 and arrived in the ECP area after about 2 hours and 45 minutes of flight time.

Review of preliminary air traffic control communications provided by the United States Air Force and FAA revealed that the flight was in contact with Tyndall Air Force Base (Tyndall Approach). The controller informed the pilot that information "quebec" was current, cleared him to OTTOE intersection (initial approach fix), and subsequently issued a clearance for the straight-in ILS runway 16 approach. A few minutes after the approach clearance the pilot confirmed that he was "established" on the approach and the controller instructed the pilot to contact the ECP air traffic control tower.

The pilot radioed the ECP air traffic control tower and informed the controller he was inbound on the ILS 16 approach. The controller acknowledged and then provided the current weather observation at the airport which included wind at 150° at 6 knots, visibility 2 statute miles, mist, overcast ceiling at 200 ft above ground level, and a barometric pressure of 29.92 inches Hg. The pilot stated, "200 overcast we'll give it and try and see if we can get her down." The controller then issued a landing clearance and subsequently offered to turn the approach lights up to the highest setting available with the pilot's concurrence. The pilot stated, "affirmative that would be good" and the controller responded with "roger." The controller subsequently

warned the pilot that if he did get beneath the overcast clouds, the approach lights would be bright, and the pilot acknowledged.

About 40 seconds later, the controller stated, “I’m receiving a low altitude alert. Check your altitude” to which the pilot stated “affirmative.” The controller then advised the pilot that Tyndall Approach noticed his flight track was deviating to the right [of the final approach course] and to use caution. He then provided the wind and ceiling information, which had not changed from the previous information provided. The pilot stated “affirmative”, and the controller followed up by stating, “one more thing, and then I won’t transmit again. There are other airports nearby with better weather conditions.” The pilot stated, “alright we’ll try this down to minimums and go-around if need be.”

About 12 seconds later the controller stated, “it appears you are drifting a little to the right” and then repeated “it appears you are drifting well to the right.” There were no further communications from the pilot despite several attempts from the controller to reach him. The controller subsequently alerted airport operations of a possible downed aircraft.

Review of the ADS-B flight track in the final approach phase found that the airplane’s course deviated left and right from the initial approach fix to the accident site, which was 1.55 nautical miles from the runway threshold. The airplane’s altitude showed momentary descents and climbs while on final approach. The final ADS-B data point recorded the airplane at 75 ft mean seal level, 144 knots groundspeed, with a ground track heading of 130°. Figure 1 shows the accident site, the final approach course represented as the yellow line, and the airplane’s flight track represented in the magenta line.

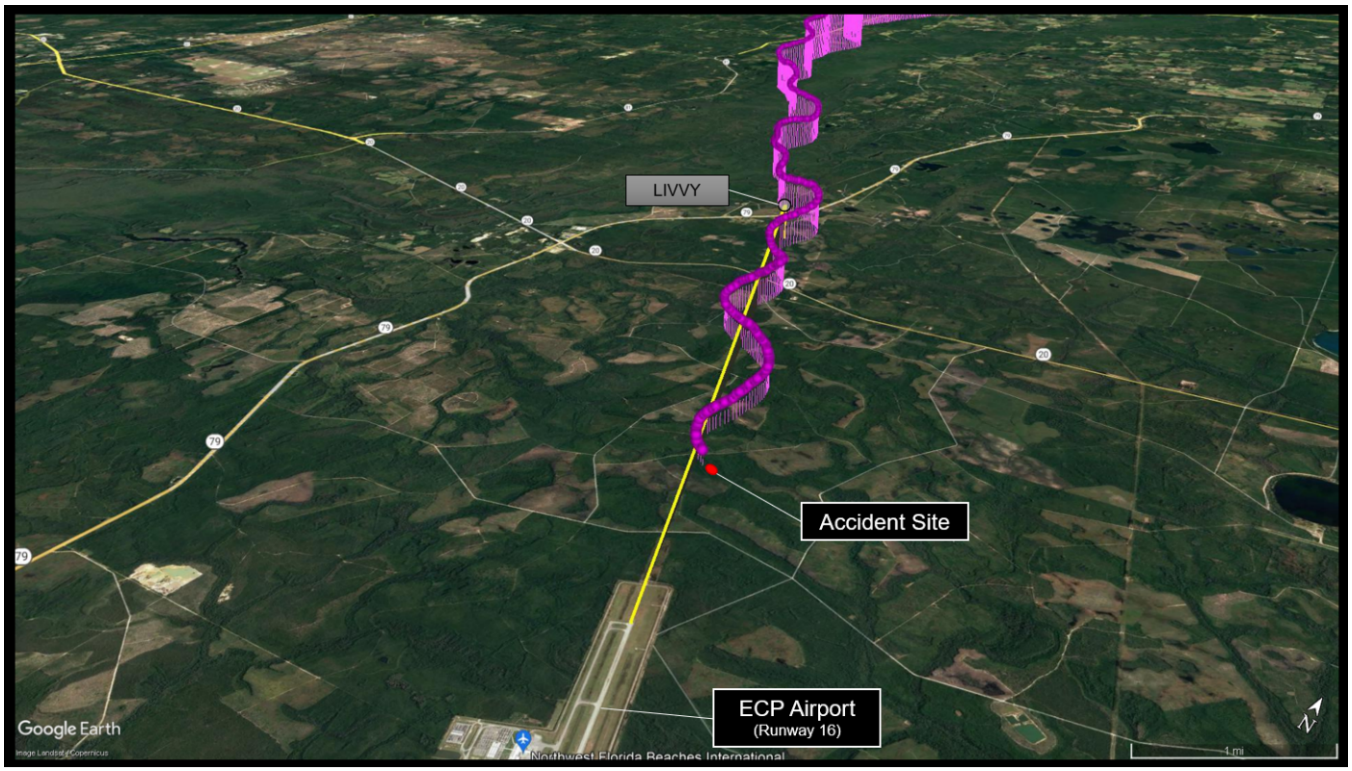

Figure 1: Overview of the flight track, final approach course, and accident site.

According to FAA airman records, the pilot held a private pilot certificate with ratings for airplane single-engine land, and instrument airplane. He was issued a third-class medical certificate on December 10, 2020. Review of the pilot's logbook revealed that he had 691 hours of total flight time, of which 569 hours were in the accident airplane. In the preceding 90 days, he had logged 5.4 hours all of which were in the accident airplane, 1.3 hours of actual instrument flight experience, and 0 hours of night flight. In the past 6 months he had logged 11 instrument approaches. His most recent flight review was competed on June 14, 2021.

The wreckage came to rest in an area of heavily wooded terrain and was fragmented. The initial impact area coincided with about 100 ft trees and the debris path was oriented on a heading of 130°-140° magnetic. The angle of descent through the trees was about 18°-20°.

All major components of the airplane were located in the debris path. Flight control and trim cable continuities were confirmed from the cockpit to each flight control surface except for the aileron balance cable which exhibited tension overload and splayed ends. There was no evidence of fire, and a strong odor of fuel was present.

The flap actuator was found in a position that corresponded to flaps up. The fuel selector handle had sustained impact damage. Its valve was found partially ported to the BOTH position.

The cockpit and instrument panel sustained significant impact damage. The primary attitude indicator remained partially attached to the panel and its vacuum air hose remained attached. The instrument sustained impact damage and its internal components had broken free and were loose in the instrument casing. The secondary electrically driven attitude indicator was loose in the debris. The altimeter was found set to a barometric pressure of 29.88 inches Hg.

The horizontal situation indicator sustained impact damage. It indicated a heading of 135°. The course deviation indicator was found set to 172° with a one dot deflection indicating the airplane was left of course. The heading bug was set to 150°. The glideslope deflection indicator was not visible.

The throttle, mixture, and propeller levers were full forward. The carburetor heat lever was found partially extended.

The engine had separated from the airframe and was found a few feet forward of the main wreckage. Evidence of angularly cut pine tree branches were observed covering the aft section of the engine. The engine was rotated manually by hand through 360° of movement. Crankshaft, camshaft, and accessory section continuity was demonstrated. Thumb-compression was displayed on each cylinder. The majority of the vacuum pump had fractured from the accessory section of the engine and was not located in the debris. It's engine driven gear operated normally when the engine was rotated.

The three bladed propeller had sheared from the propeller flange and was located a few feet from the engine. The blades exhibited leading edge gouging, chordwise scratches, and torsional twisting.

The wreckage was retained for further examination.

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N182XT
Model/Series:	182Q NO SERIES	**Aircraft Category:**	Airplane
Amateur Built:			
Operator:		**Operating Certificate(s) Held:**	None
Operator Designator Code:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	IMC	**Condition of Light:**	NightDark
Observation Facility, Elevation:	ECP,57 ft msl	**Observation Time:**	18:51 Local
Distance from Accident Site:	3 Nautical Miles	**Temperature/Dew Point:**	20°C /20°C
Lowest Cloud Condition:	200 ft AGL	**Wind Speed/Gusts, Direction:**	8 knots / , 150°
Lowest Ceiling:	Overcast / 200 ft AGL	**Visibility:**	2 miles
Altimeter Setting:	29.92 inches Hg	**Type of Flight Plan Filed:**	IFR
Departure Point:	McMinnville, TN (RNC)	**Destination:**	Panama City, FL (ECF)

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Fatal	**Latitude, Longitude:**	30.395611,-85.810205

Administrative Information

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Kevin Atkins; FAA/ FSDO; Birmingham , AL Ernest Hall; Textron Aviation; Wichita , KS
Note:	