



National Transportation Safety Board Aviation Accident Preliminary Report

Location:	Winfield, TX	Accident Number:	CEN20LA245
Date & Time:	06/24/2020, 1401 CDT	Registration:	N958HP
Aircraft:	Cessna 182	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General Aviation - Aerial Observation		

On June 24, 2020, about 1401 central daylight time, a Cessna 182R airplane, N958HP, was substantially damaged when it was involved in an accident near Winfield, Texas. The pilot sustained serious injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* (CFR) Part 91 pipeline patrol flight.

The pilot stated that she departed Cushing Municipal Airport (CUH), Cushing, Oklahoma, with a full fuel load (88 gallons useable) and intended to make a fuel stop at Mount Pleasant Regional Airport (OSA), Mount Pleasant, Texas, before continuing onto Ennis Municipal Airport (F41), Ennis, Texas, where she planned to stay overnight. According to automatic dependent surveillance-broadcast (ADS-B) data, the flight departed CUH about 0953.

The pilot stated that the flight was uneventful until the airplane crossed over US Interstate 30 near Winfield, Texas, at which point she turned from the pipeline right-of-way toward her planned fuel stop at OSA. However, shortly after crossing US Interstate 30, the engine began to "sputter" and "run rough." The pilot attempted to restore engine power by "switching fuel tanks a couple of times" and selecting a full-rich fuel mixture; however, she was unable to restore engine power and it "surged" between idle and a high rpm a couple of times before it had a total loss of engine power. She did not recall hearing the engine backfire or feeling any excessive vibration before the total loss of engine power.

The pilot stated that she had made a couple turns over US Interstate 30 while the engine was running rough and that the vehicle traffic precluded a safe landing on the roadway; there were also high-voltage power lines and antennas in the vicinity. She subsequently located an open field for a forced landing, but the airplane was unable to stop before it collided with a fence and tree line that bordered the field. The pilot stated that she was wearing her 3-point safety harness throughout the flight.

The pilot stated that she generally flies with the fuel selector positioned on BOTH and, as such, does not normally select the right or left fuel tank during a flight. The pilot stated that she does reposition the fuel selector to the left tank before refueling, but also follows a checklist to ensure that she repositions the fuel selector to BOTH before takeoff. She recalled repositioning the fuel selector twice after the engine began running rough but did not remember which fuel

selector positions she had attempted. The pilot was unsure if the fuel selector was positioned on BOTH before the engine began to run rough.

The pilot reported that the average fuel consumption rate was 10-11 gallons per hour (gph) for the Cessna 182R airplane, and that the company requires their pilots to land for fuel after 5 hours of flying. The pilot stated that she prefers to calculate her fuel remaining based on how long she has been flying and does not rely on the airplane's analog fuel quantity gauges because they are often inaccurate. The pilot noted that after 4.1 hours of flight time the airplane should still have had about 44 gallons of fuel remaining.

The pilot stated that a typical observation flight is flown about 700 ft above ground level while the pilot observes the pipeline right-of-way for evidence of encroachment, heavy machinery, fire, and pipeline leaks. The pilot noted that most of her attention during the flight had been dedicated to observing the ground. Additionally, the pilot reported that the pipeline company had recently complained that there had been some activity along the right-of-way that should have been spotted and reported during a previous flight, and, as a result, she had deliberately paid more attention to the right-of-way than she had on previous flights.

On March 20, 2020, the engine, a Continental Motors O-470-U18B, serial number 1038697, was remanufactured at the factory. According to maintenance documentation, the engine had accumulated 55.9 hours since it was installed on the airplane.

The airplane wreckage was recovered from the accident site to a secured location and will be examined at a future date.

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N958HP
Model/Series:	182 R	Aircraft Category:	Airplane
Amateur Built:	No		
Operator:	Brentco Aerial Patrol	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	OSA, 364 ft msl	Observation Time:	1355 CDT
Distance from Accident Site:	10 Nautical Miles	Temperature/Dew Point:	31 °C / 21 °C
Lowest Cloud Condition:	Scattered / 3800 ft agl	Wind Speed/Gusts, Direction:	Calm / ,
Lowest Ceiling:	None	Visibility:	7 Miles
Altimeter Setting:	29.91 inches Hg	Type of Flight Plan Filed:	Company VFR
Departure Point:	Cushing, OK (CUH)	Destination:	Mount Pleasant, TX (OSA)

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	33.164167, -95.147500 (est)

Administrative Information

Investigator In Charge (IIC):	Andrew T Fox
Additional Participating Persons:	Darren P Pittacora; Federal Aviation Administration, North Texas FSDO; Irving, TX
Note:	The NTSB did not travel to the scene of this accident.