



Aviation Investigation Final Report

Location:	Abilene, Texas	Accident Number:	CEN19LA070
Date & Time:	December 21, 2018, 11:45 Local	Registration:	N254RA
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Aerial observation		

Analysis

The commercial pilot was conducting a pipeline patrol flight. He reported that, while he was looking down in the cockpit writing down observations about the pipeline, he felt the airplane pull left; the airplane had struck a cell tower wire. The pilot stated that he did not see the wire because he was looking down. The pilot was able to control the airplane, immediately declared an emergency, and landed at an airport about 10 miles north of where the wire strike occurred.

Examination of the airplane revealed that a 4-ft-long section of the left wing was torn off the airplane, just outboard of the left aileron. The pilot stated that many pipeline patrol operations have an observer onboard in addition to the pilot, one of whom looks outside the airplane to observe the pipeline while the other person writes down the observations. He also stated that he could have waited to write down information after passing the tower area.

Probable Cause and Findings

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

The pilot's failure to see and avoid a cell tower wire during a pipeline patrol flight. Contributing to the accident was the pilot's distraction due to writing down observations about the pipeline while flying.

Findings

Personnel issues	Decision making/judgment - Pilot
Personnel issues	Monitoring environment - Pilot
Aircraft	Altitude - Not attained/maintained
Environmental issues	Wire - Effect on operation

Factual Information

History of Flight

Maneuvering	Miscellaneous/other (Defining event)
Maneuvering	Collision with terr/obj (non-CFIT)
Landing	Off-field or emergency landing

On December 21, 2018, about 1145 central standard time, a Cessna 172M, N254RA, registered and operated by Reynolds Aviation, Beach City, Texas, sustained substantial damage when it collided with a tower wire about 10 miles south of the Abilene Regional Airport (AB), Abilene, Texas. The commercial pilot, who was the sole occupant, was not injured. Visual meteorological conditions prevailed and a flight plan was not filed. The pipeline aerial observation flight was being conducted under the provisions of Code of Federal Regulations Part 91. The flight originated about 1000 from the Draughon-Miller Central Texas Regional Airport (TPL), Temple, Texas, and was enroute to the Winston Field Airport (SNK), Snyder, Texas.

The pilot stated that he was conducting an aerial pipeline inspection. He stated that he was looking down in the cockpit, writing down pipeline observation information. At the same time, he felt a pull to the left. The airplane struck a tower wire. The pilot stated that he did not see the tower wires. The pilot was able to control the airplane, immediately declared an emergency, and landed the airplane at ABI, which was about 10 miles north of the wire strike. Inspection of the airplane revealed a 4-foot section of the left wing was torn off the airplane, just outboard of the left aileron.

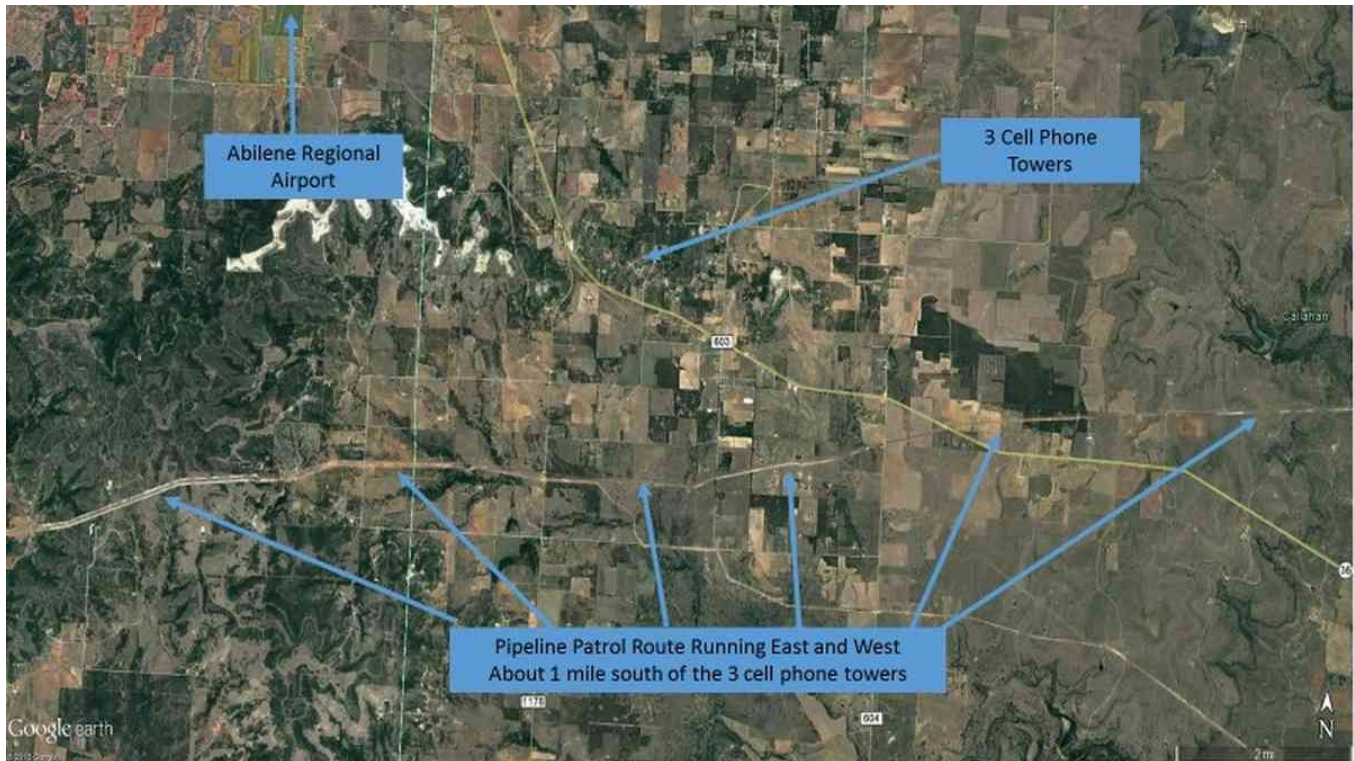


Figure 1. Overhead Image of Pipeline Route and Tower/Wire Locations

The pilot stated in NTSB Form 6120, that many pipeline patrol operations have an observer on board in addition to the pilot, one writing down information, and one looking outside the airplane. He also stated that he could have waited to write down information after passing the tower area.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	39, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	December 18, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	November 20, 2018
Flight Time:	2919 hours (Total, all aircraft), 2419 hours (Total, this make and model), 2860 hours (Pilot In Command, all aircraft), 179 hours (Last 90 days, all aircraft), 48 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N254RA
Model/Series:	172 M	Aircraft Category:	Airplane
Year of Manufacture:	1975	Amateur Built:	
Airworthiness Certificate:	None	Serial Number:	17265910
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	November 9, 2018 Annual	Certified Max Gross Wt.:	2299 lbs
Time Since Last Inspection:	60 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2734 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320 SERIES
Registered Owner:		Rated Power:	150 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	1751 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	11:17 Local	Direction from Accident Site:	150°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	14°C / -5°C
Precipitation and Obscuration:			
Departure Point:	Temple, TX (TPL)	Type of Flight Plan Filed:	None
Destination:	Snyder, TX (SNK)	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	Abilene Regional Airport ABI	Runway Surface Type:	
Airport Elevation:	1791 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop;Precautionary landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	32.259998,-99.56639

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	
Original Publish Date:	April 13, 2020
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98892

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