



# Aviation Investigation Final Report

<b>Location:</b>	Kaplan, Louisiana	<b>Accident Number:</b>	CEN18FA359
<b>Date &amp; Time:</b>	August 31, 2018, 07:56 Local	<b>Registration:</b>	N7430J
<b>Aircraft:</b>	Piper PA28R	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>	Controlled flight into terr/obj (CFIT)	<b>Injuries:</b>	2 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The airline transport pilot and his daughter departed in day visual meteorological conditions with the morning sun located behind the airplane. About 10 minutes after takeoff, the airplane impacted a charted, 1,793-ft-tall television/radio tower about 200 ft below the apex of the tower.

Examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation. The pilot and his wife were in the process of divorce. The pilot's wife was very concerned after the pilot and her daughter departed without notice several weeks before the accident. The pilot had become unresponsive to phone calls from his work supervisor and had been making unauthorized purchases with his work credit card before the accident. On the day before the accident, the pilot's attorney informed the pilot that a warrant had been issued for his arrest.

A direct course from the departure airport to the pilot's home airport was over 5 miles south of the tower. Although a surveillance video and witness statements indicated that the tower's lighting was erratic, the tower was adequately lit, and the visibility of the tower was not a factor in the accident.

## Probable Cause and Findings

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

The pilot's failure to maintain clearance from a charted and illuminated television/radio tower.

## Findings

<b>Personnel issues</b>	Flight planning/navigation - Pilot
<b>Environmental issues</b>	Tower/antenna (incl guy wires) - Awareness of condition
<b>Environmental issues</b>	Tower/antenna (incl guy wires) - Effect on operation

## Factual Information

### History of Flight

<b>Enroute-cruise</b>	Controlled flight into terr/obj (CFIT) (Defining event)
<b>Uncontrolled descent</b>	Collision with terr/obj (non-CFIT)

On August 31, 2018, about 0756 central daylight time, a Piper PA-28R airplane, N7430J, impacted a tower near Kaplan, Louisiana. The pilot and passenger were fatally injured, and the airplane was destroyed. The airplane was registered to a private individual and operated by Space City Aviators under the provisions of Title 14 *Code of Federal Regulations* Part 91. Day visual meteorological conditions prevailed for the personal flight, which departed without a flight plan from Abbeville Chris Crusta Memorial Airport (IYA), Abbeville, Louisiana, about 0746.

The pilot and his daughter were returning toward their home state of Texas following a vacation to Florida. They arrived to IYA on the afternoon before the accident and stayed overnight at a hotel in Abbeville. According to a hotel surveillance camera, they departed this hotel at 0708.

Following departure from IYA, an uncontrolled airport, the airplane flew about 15 miles to the northwest, where it struck a television/radio tower in a rural area. The tower's height was 1,793 ft above ground level and the airplane impacted about 200 ft below the apex of the tower. The highly fragmented wreckage was dispersed over an area about 700 ft wide. The tower collapsed and the buildings at the base of the tower, which were unoccupied, caught fire and were destroyed. No ground injuries occurred.

### Pilot Information

<b>Certificate:</b>	Airline transport; Commercial; Flight instructor	<b>Age:</b>	45, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	February 27, 2017
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 6000 hours (Total, all aircraft), 100 hours (Total, this make and model)		

## Passenger Information

<b>Certificate:</b>		<b>Age:</b>	6,Female
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

The pilot, age 45, held a Federal Aviation Administration (FAA) airline transport pilot certificate with airplane single-engine land, multi-engine land, and instrument airplane ratings, as well as a flight instructor certificate with airplane single-engine land and multi-engine landing ratings. On February 27, 2017, the pilot was issued a third-class medical certificate with no restrictions and reported a total flight time of 6,000 hours. The pilot was employed as an FAA operations inspector.

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N7430J
<b>Model/Series:</b>	PA28R 180	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1968	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	28R-30774
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	July 18, 2018 Annual	<b>Certified Max Gross Wt.:</b>	2500 lbs
<b>Time Since Last Inspection:</b>	36 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3980 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-360-B1E
<b>Registered Owner:</b>		<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

The airplane was manufactured in 1968 and was equipped with a Lycoming IO-360-B1E engine, serial number L-5225-51A, and a Hartzel two-blade, all-metal propeller. The airplane underwent an annual inspection on July 18, 2018. At the time of the accident, the airframe had accumulated 3,980 hours, with a total engine time of 4,726 hours and time since engine overhaul of 1,782 hours. The airplane was one of four in a fleet offered for rent at a flight club based at La Porte Municipal Airport (T41), La Porte,

Texas. The pilot was a member of the flight club.

### Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KIYA, 50 ft msl	<b>Distance from Accident Site:</b>	15 Nautical Miles
<b>Observation Time:</b>	07:55 Local	<b>Direction from Accident Site:</b>	104°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	50°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	29.98 inches Hg	<b>Temperature/Dew Point:</b>	23°C / 23°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Abbeville, LA (IYA )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	07:46 Local	<b>Type of Airspace:</b>	Class G

### Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	1 Fatal	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Fatal	<b>Latitude, Longitude:</b>	30.038888,-92.370834

The wreckage was in four principal sections: fuselage, empennage and cabin; engine and propeller; right wing; and left wing. Near the base of the tower, which collapsed on heading of 255°, a 20 ft wide area of fuel blight was noted to the grass. The empennage remained attached to the fuselage and lay on its right side with the cabin underneath. Buckling was noted throughout the empennage skin.

The aileron control tee bar was impact damaged and the chain was displaced, with the left aileron drive cable attached to the chain. The chain was pulled down into the cabin floor tunnel and a broomstraw separation occurred inboard of the turnbuckle barrel. The rudder remained attached to the vertical stabilizer and rudder cables retained continuity from the pedal bar in the cockpit to the rudder. The vertical stabilizer and stabilator remained attached to the empennage, with normal cable continuity from the tee bar in the cockpit to the stabilator balance weight.

The transponder was found in the off position. Examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal flight operations.

## Additional Information

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The impacted tower was correctly depicted on the FAA sectional chart. Surveillance video of the tower taken during the early morning hours before the accident revealed lighting anomalies. Instead of blinking in unison, the tower's lights would illuminate in a chaotic, random manner. Due to sun glare, video surveillance was not available after 0607 on the morning of the accident.

A witness who lived near the tower stated the lights were often erratic. An aerial application pilot who frequently flew near the tower stated the intensity of the tower's lights ranged from very bright to dim. This pilot flew during the morning of the accident and recalled the tower's lights as bright. A direct course from IYA to the pilot's home airport at T41 would have positioned the flight over five miles south of the tower.

## Medical and Pathological Information

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On August 31, 2018, a forensic pathologist from the Louisiana Forensic Center, Youngsville, Louisiana performed an autopsy on the pilot and passenger. The cause of death for the pilot and passenger was blunt force injuries. Toxicology testing performed at the FAA Forensic Sciences Laboratory on the pilot was negative for drugs and alcohol.

According to the pilot's second wife, she and the pilot were in the process of getting a divorce following several family-related challenges. She had been very concerned when the pilot left with their daughter without notice and until the evening before the accident, she had not seen or spoke with her daughter since July 27, 2018. According to his FAA supervisor, the pilot's behavior became erratic before the accident. He was unresponsive to phone calls and made purchases for personal items with his work credit card while in Florida, which was not authorized. On the day before the accident, the pilot was informed by his attorney that a warrant had been issued for his arrest.

## Administrative Information

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<b>Investigator In Charge (IIC):</b>	Folkerts, Michael
<b>Additional Participating Persons:</b>	Paul Marks; Flight Standards District Office; Baton Rouge, LA Kathryn Whitaker; Piper Aircraft Inc.; Vero Beach, FL
<b>Original Publish Date:</b>	April 20, 2020
<b>Note:</b>	The NTSB traveled to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=98200">https://data.nts.gov/Docket?ProjectID=98200</a>

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).