



National Transportation Safety Board Aviation Accident Preliminary Report

Location:	Paducah, KY	Accident Number:	ERA20FA026
Date & Time:	10/31/2019, 1926 CDT	Registration:	N181AG
Aircraft:	Piper PA32R	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

On October 31, 2019, at 1926 central daylight time, a Piper PA32R-301T, N181AG, was destroyed during a forced landing following a total loss of engine power while on approach to the Barkley Regional Airport (PAH), Paducah, Kentucky. The private pilot, who was also the owner of the airplane was fatally injured. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight which originated at the Mitchell Municipal Airport (MHE), Mitchell, South Dakota, about 1628, and was conducted under the provisions of Title 14 *Code of Federal Regulations* Part 91.

Preliminary information obtained from the Federal Aviation Administration (FAA) revealed the purpose of the flight was for the pilot to return to PAH, which was his home airport, after a hunting trip. In a telephone interview, a representative from the fixed-base-operator at MHE stated that the accident airplane arrived on November 27, 2019, and he serviced the airplane with 31 gallons of fuel, which filled the tanks. He further commented on the smoothness of the engine as the airplane approached the fuel pumps.

Preliminary radar and voice communication information from FAA air traffic control (ATC) facilities for the accident flight revealed the airplane was receiving flight following services from the Memphis Air Route Traffic Control Center (ARTCC) and all communications were routine before the ARTCC controller issued a frequency change to the local controller at PAH.

In an interview at the accident site, the local controller said he was familiar with the pilot and the accident airplane. He said that the pilot checked in on the tower frequency and he provided the pilot with the current altimeter, wind, and active runway information. The pilot informed him that he was "lined up" for a straight-in landing to runway 14 which he requested, and the controller approved. The controller advised the airplane was "cleared to land" which the pilot acknowledged. Approximately 1.5 minutes later, the pilot advised, "I've lost power." The controller asked the pilot if he thought the airplane would reach the runway, and the pilot responded, "Yes." Soon after, the pilot advised, "I'm not going to make it, I'm in the trees." There were no further communications from the accident airplane.

The airplane collided with trees and terrain, aligned with runway 14 at PAH, about 1.5 miles prior to the landing threshold.

The pilot held a private pilot certificate with a rating for airplane single engine land. His most recent FAA third class medical certificate was issued November 13, 2013. The pilot reported 120 total hours of flight experience on that date. Interpolation of FAA and aircraft records revealed the pilot had an estimated 570 total hours of flight experience, of which 450 hours were in the accident airplane make and model.

According to FAA airworthiness records, the airplane was manufactured in 2006 and was powered by a Lycoming TIO-540-AH1A, 300-horsepower engine. Its most recent annual inspection was completed February 19, 2019 at 1,588.7 total aircraft hours.

The airplane wreckage was examined at the site, and all major components were accounted for at the scene. The wreckage path was oriented about a 140° heading and was approximately 100 ft in length. The initial tree strike was about 60 ft above the ground, where the outboard 8 ft of the left wing was observed suspended.

The main wreckage came to rest adjacent to a railroad on approximately a 090° heading. The baggage compartment, cockpit, cabin area, the inboard sections of each wing, and the empennage were consumed by post-crash fire.

The instrument panel and engine control quadrant were consumed by fire. The T-bar assembly exhibited thermal damage but the aileron and stabilator cables remained attached to their respective attachment points on the T-bar assembly. The rudder pedals were thermally damaged, and the rudder control cables remained attached. Flight control continuity was established from the rudder pedal assembly to the rudder. Stabilator control continuity was established from the T-bar to the stabilator. Right aileron control continuity was established from the T-bar to the right aileron bellcrank. Left aileron continuity was established from the T-bar and through overload separations to the left aileron bellcrank. Measurement of the electric flap actuator jackscrew corresponded to a wing flap setting of 40° (full flaps).

The nose landing gear remained attached to the engine mount and was partially extended during recovery. Thermal damage was observed to the nose wheel assembly. The engine cowlings remained attached to their attaching points and exhibited impact and thermal damage. The induction air filter was impact-damaged and the alternate air door was in the "open/alternate air position."

The engine was rotated by hand at the propeller, and continuity was confirmed from the powertrain through the valvetrain to the accessory section. Compression was confirmed on all cylinders using the "thumb" method. Borescope examination of each cylinder revealed signatures consistent with normal wear and lubrication. The magnetos sustained thermal damage. They were removed and rotated by hand, but neither produced spark. The fuel pump was removed, actuated with a drill, and drew and expelled air into the intake port and out of the output port. The fuel inlet screen and the fuel injector nozzles were clear and absent of debris.

The turbocharger was removed, and both the compressor and exhaust impellers rotated freely and displayed no visible damage.

The fuel lines were consumed by fire and the fuel selector valve exhibited thermal damage. The fuel selector control lever was observed near the right fuel tank position. However, examination of the fuel selector valve revealed the selector plate was out of the detent and not fully seated in the right fuel tank position. The fuel selector valve's bowl was thermally damaged, and its filters were consumed by fire. Further examination of the selector valve revealed its lever was seized in position. Upon disassembly, the selector plate indicated an intermediate selector valve position.. During disassembly, when the selector valve could be rotated and was placed in the left or right fuel tank position detent, it was noted that the associated ports were unobstructed.

At 1853, the weather recorded at PAH included winds from 250° at 3 knots, clear skies, visibility 10 statute miles, temperature was 0°C, dew point -3°C, and an altimeter setting of 30.27 inches of mercury.

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N181AG
Model/Series:	PA32R 301T	Aircraft Category:	Airplane
Amateur Built:	No		
Operator:	Cloud Hugger Transportation Llc	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	
Observation Facility, Elevation:	PAH, 410 ft msl	Observation Time:	2353 UTC
Distance from Accident Site:	1 Nautical Miles	Temperature/Dew Point:	0°C / -3°C
Lowest Cloud Condition:	Clear	Wind Speed/Gusts, Direction:	3 knots / , 250°
Lowest Ceiling:	None	Visibility:	10 Miles
Altimeter Setting:	30.27 inches Hg	Type of Flight Plan Filed:	None
Departure Point:	Mitchell, SD (MHE)	Destination:	Paducah, KY (PAH)

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	37.103333, -88.817222 (est)

Administrative Information

Investigator In Charge (IIC):	Brian C Rayner
Additional Participating Persons:	Stephen Travis; FAA/FSDO; Louisville, KY Damien Galbraith; Piper; Vero Beach, FL David Harsanyi; Lycoming Engines; Williamsport, PA
Note:	The NTSB traveled to the scene of this accident.