

Aviation Investigation Preliminary Report

Location:	Kearney, MO	Accident Number:	CEN23FA314
Date & Time:	July 20, 2023, 09:34 Local	Registration:	N200RA
Aircraft:	Piper PA-31P	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Ferry		

On July 20, 2023, about 0934 central daylight time, a Piper PA-31P airplane, N200RA, was destroyed when it was involved in an accident near Kearney, Missouri. The pilot sustained fatal injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 maintenance ferry flight.

According to multiple witnesses, the owner and a mechanic worked on the airplane for about six months; the most recent annual inspection was completed in 2015. Two witnesses reported that during an engine ground run about two weeks before the accident, the right engine was difficult to start and would not produce full power. The witnesses also stated that the inboard fuel tanks “horribly” leaked fuel anytime the airplane was fueled.

About two weeks before the accident, the owner received a Special Airworthiness Certificate: Special Flight Permit, to ferry the airplane from Mosby, Missouri, to Kingman, Kansas, to complete an annual inspection. Witnesses reported that three pilots declined to perform the ferry flight for the owner.

Before the accident flight, the owner requested an airport lineman to fuel the airplane. During the fueling of 18.53 gallons of Avgas, an unknown amount of fuel leaked from the right-wing inboard fuel tank (see Figure 1.). According to the mechanic, the airplane had 140 gallons onboard divided between both 50 gallon inboard wing fuel tanks and 40 gallons in the right wing auxiliary fuel tank.



Figure 1: Video screen capture of the fuel leak provide by the lineman witness.

Multiple cellphone video recordings of the takeoff sequence showed the airplane veer to the right and attempt to rotate and before the airplane settled back to the runway. The recordings showed the airplane become airborne near the runway end and yaw to the right before it climbed parallel with the rising terrain. The witnesses observed the airplane barely cleared a line of trees past the departure end of the runway and made a left turn before it disappeared behind trees.

A witness about 1.60 nautical miles to the north of the airport stated he heard a loud airplane which appeared from behind trees headed towards his residence. He observed the airplane strike two static wires on a power transmission line before it impacted the canopy of a large tree in his front yard (see Figure 2.). The airplane continued in a left bank toward a nearby soybean field and impacted the terrain in a nose-low, left bank attitude. The airplane slid several hundred feet, and a postcrash fire ensued.

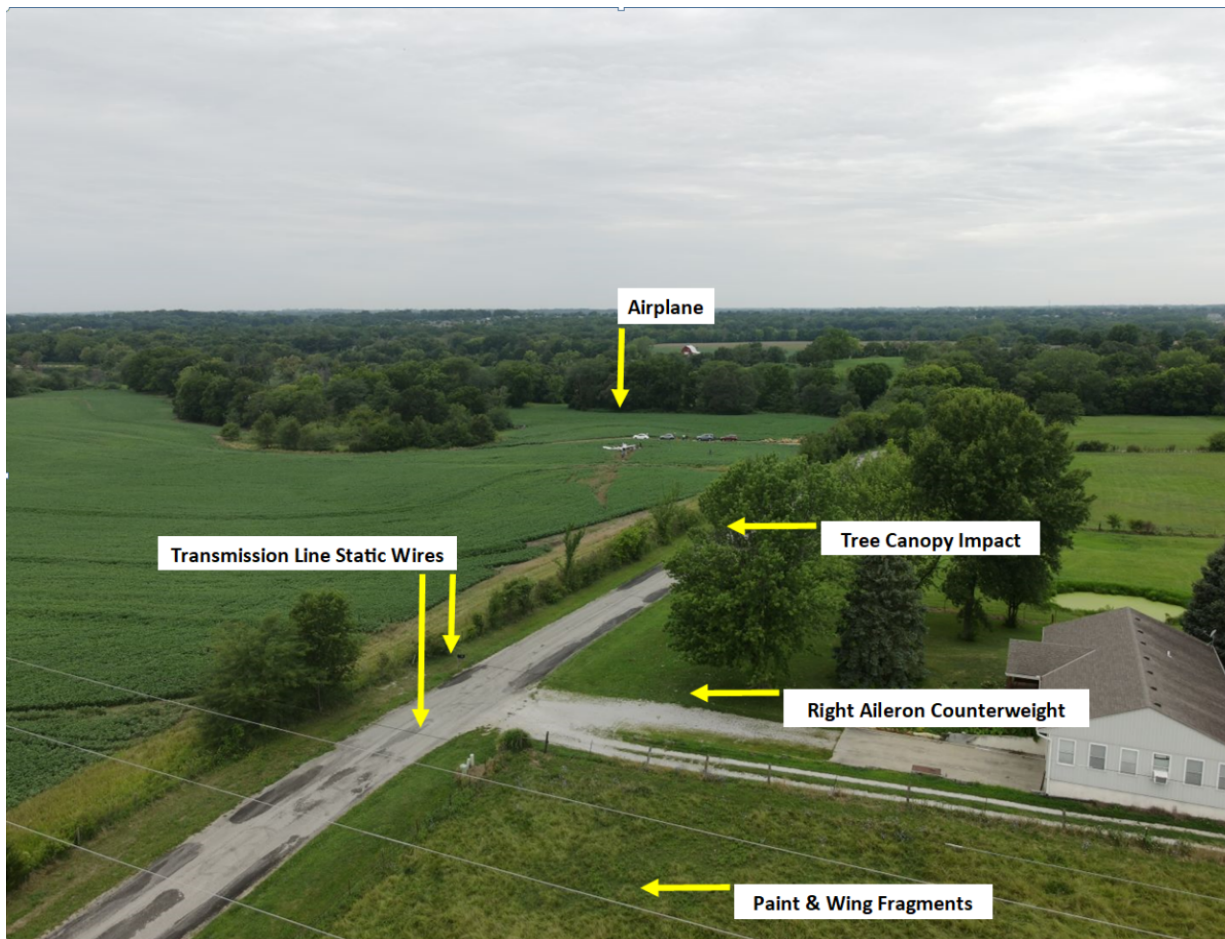


Figure 2. Transmission line and tree impact provided by the IIC

The accident site was located in a relatively flat agricultural field about 1.6 nautical miles north of the runway. The wires were located about 735 ft before the main wreckage and were about 65 ft above ground level (agl). The second identified point of contact was tree canopy impact about 60 ft AGL and 150 ft after the wire strike. The airplane then impacted the ground and a debris path extended in the field about 313 ft. on a heading of 254°, to the main wreckage.

The main wreckage consisted of the fuselage, empennage, right wing, and the left wing separated near normal orientation and location.

The airplane was retained for further examination.

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N200RA
Model/Series:	PA-31P	Aircraft Category:	Airplane
Amateur Built:			
Operator:		Operating Certificate(s) Held:	None
Operator Designator Code:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	Condition of Light:	Day
Observation Facility, Elevation:	KGPH,778 ft msl	Observation Time:	09:35 Local
Distance from Accident Site:	2 Nautical Miles	Temperature/Dew Point:	27°C /21°C
Lowest Cloud Condition:	Scattered / 2400 ft AGL	Wind Speed/Gusts, Direction:	4 knots / , 330°
Lowest Ceiling:		Visibility:	10 miles
Altimeter Setting:	30.06 inches Hg	Type of Flight Plan Filed:	None
Departure Point:	Mosby, MO (GPH)	Destination:	Kingman, KS (9K8)

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	39.363844,-94.321916

Administrative Information

Investigator In Charge (IIC):	Finne, Andrew
Additional Participating Persons:	Hirsch, Jon; Piper Aircraft Inc; Vero Beach, FL Helgeson, Troy; Lycoming Engines; Williamsport, PA Wood, David; FAA-FSDO; Kansas City, KS Doud, Les; Hartzell Propeller
Note:	