

# **Aviation Investigation Preliminary Report**

Location: Osage Beach, MO Accident Number: CEN23FA304

Date & Time: July 13, 2023, 11:57 Local Registration: N8225N

Aircraft: Piper PA28 Injuries: 2 Fatal, 1 Serious

Flight Conducted Under: Part 91: General aviation - Personal

On July 13, 2023, about 1157 central daylight time, a Piper PA-28-140 airplane, N8225N, sustained substantial damage when it was involved in an accident near Osage Beach, Missouri. The pilot and one passenger sustained fatal injuries. One passenger sustained serious injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot flew the airplane from its home base at the Carrollton Memorial Airport (K26), Carrollton, Missouri, to the Grand Glaize-Osage Beach Airport (K15), Osage Beach, Missouri. The airplane arrived at K15 on July 12, 2023, about 1030. According to the airport manager at K15, the airplane did not refuel at the airport.

The purpose of the flight was to take the two passengers on a flight around the local area to view scenery. The airplane departed from runway 32 at K15. Shortly after the takeoff, witnesses observed the tail of the airplane was lower than the nose. The witnesses reported the airplane "banked" to the right and impacted a heavily wooded area on private property. The witnesses did not report any abnormal noises being emitted from the airplane.

The airplane came to rest nose down near multiple large trees. The accident site was about 0.55 miles to the north of the departure end of runway 32. The airplane sustained substantial damage to the fuselage, both wings, and the empennage.

An examination of the wreckage at the accident site did not reveal any preimpact mechanical malfunctions or failures with the airframe or the engine that would have precluded normal operation. The trim tab jackscrew was found extended above the drum, with about 17 threads exposed (about 1 and ¾"), that corresponded to a full nose-up trim setting. According to the Piper Cherokee 140 B Owner's Handbook, the take-off checklist states, "trim tab set." The wreckage was recovered from the accident site and was transported to a secure location.

Page 1 of 2 CEN23FA304

The airplane was equipped with a stall warning system, that includes a red light that illuminates on the left side of the instrument panel between 5 and 10 mph above the stall speed. The airplane was equipped with a Lycoming 0-320-E2A reciprocating engine and a Sensenich 74DM6-0-58 fixed-pitch aluminum propeller.

The estimated density altitude for K15 was 3,205 ft.

### **Aircraft and Owner/Operator Information**

Aircraft Make:	Piper	Registration:	N8225N
Model/Series:	PA28 140	Aircraft Category:	Airplane
Amateur Built:			
Operator:	On file	Operating Certificate(s) Held:	None
Operator Designator Code:	None		

#### **Meteorological Information and Flight Plan**

Conditions at Accident Site:	VMC	Condition of Light:	Day
Observation Facility, Elevation:	KTBN,1159 ft msl	Observation Time:	11:55 Local
Distance from Accident Site:	34 Nautical Miles	Temperature/Dew Point:	30°C /22°C
<b>Lowest Cloud Condition:</b>	Scattered	Wind Speed/Gusts, Direction:	6 knots / , 270°
Lowest Ceiling:	Broken / 2600 ft AGL	Visibility:	9 miles
Altimeter Setting:	29.86 inches Hg	Type of Flight Plan Filed:	None
Departure Point:	Osage Beach, MO (K15)	Destination:	Osage Beach, MO

## **Wreckage and Impact Information**

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal, 1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal, 1 Serious	Latitude, Longitude:	38.121106,-92.68833 (est)

#### **Administrative Information**

Investigator In Charge (IIC):	Hodges, Michael
Additional Participating Persons:	Thomas Davis; FAA Kansas City FSDO; Kansas City, MO Jonathon Hirsch; Piper Aircraft; Vero Beach, FL Michael Childers; Lycoming Engines; Williamsport, PA
Note:	

Page 2 of 2 CEN23FA304