

# **Aviation Investigation Preliminary Report**

Location:	Micanopy, FL	Accident Number:	ERA24FA036
Date & Time:	November 14, 2023, 14:09 Local	Registration:	N7806W
Aircraft:	Piper PA-28-180	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

On November 14, 2023, at 1409 eastern standard time, a Piper PA-28-180, N7806W, was destroyed when it was involved in an accident near Micanopy, Florida. The private pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

According to preliminary air traffic control (ATC) communications, prior to departure, the ground controller at Kissimmee Gateway Airport (ISM), Orlando, Florida, reported that the weather conditions were "IFR" indicating the ceiling was broken clouds at 800 ft above ground level (agl). About 1 minute later the controller stated there were updated weather conditions, which were few clouds at 800 ft agl, then issued a taxi clearance for the airplane. According to automatic dependent surveillance - broadcast (ADS-B) data, the airplane departed ISM about 1245.

ADS-B flight track data indicated that after departure, the airplane flew on a northerly track until about 1333, when a brief turn towards the east was observed, which was followed by a left turn back to a northerly heading. Subsequently, the airplane performed several erratic 360° turns, as well as numerous climbs and descents to a maximum altitude of 6,900 ft mean sea level (msl) and a minimum altitude of 500 ft msl, between 1335 and 1409 prior to losing radar contact. The rate of descent was in excess of 5,000 ft per minute for the final data point. The main wreckage was located about 650 ft northeast of the final ADS-B data point (see Figure 1).

Preliminary review of air traffic control communications revealed that during the erratic maneuvering, the pilot called "mayday" and stated he "was lost in weather." During this period, the pilot reported multiple times that he was having issues with his instruments, he "mistakenly flew into weather," "it's completely white," and he could not see anything outside.



Figure 1. View of final flight track data. Yellow line indicates the airplane flight track for the final approximate 40 minutes of flight.

The airplane came to rest in a heavily wooded area at an elevation of 100 ft mean sea level. It struck several trees before impacting the sandy terrain. The airplane came to rest in a crater that was about 4 ft deep. All major components of the airplane were located in the vicinity of the main wreckage.

The fuselage was fragmented and the cabin was crushed forward. Flight control continuity was established from the cabin to all flight control surfaces through multiple cuts made by first responders and tensile overload failures. The right wing was separated from the fuselage at the wing root. The forward section of the right wing was impact crushed aft. The outboard approximate 4 ft of the right wing was impact separated and located along the debris path. The left wing was fragmented. The inboard section of the left wing was impact crushed aft. The empennage was impact separated from the fuselage. The stabilator remained attached to the empennage. The trim tab remained attached to the stabilator. The vertical stabilizer and rudder were impact separated and located in the vicinity of the main wreckage.

The attitude indicator was separated from the instrument panel and disassembled. Rotational scoring was noted on the gyroscope and the gyroscope housing. The electric turn and bank indicator was removed from the instrument panel. It was disassembled and vertical scoring was noted on the gyroscope. The compass was separated from the instrument panel. During examination, the compass float moved when the instrument was manipulated.

The engine remained attached to the forward section of the fuselage through all engine mounts. The crankshaft could not be rotated by hand. The propeller flange was impact bent

but remained attached to the crankshaft. The rocker box covers were removed, and no anomalies were noted with the rocker arms. The cylinders were examined with a lighted borescope, sand and oil were noted in the cylinders, but no anomalies were noted. The magnetos were removed from the engine and spark was noted on all towers. All spark plugs were removed except the No. 2 bottom spark plug, which was impact damaged. The spark plugs were massive electrode type, all were light grey in color, and exhibited worn out – normal wear when compared to the Champion Check-A-Plug Chart. The carburetor was disassembled, the carburetor bowl did not contain fuel; however, the carburetor floats exhibited hydraulic deformation. The oil filter was removed from the accessory section of the engine and disassembled. No metallic debris was noted in the filter. The oil suction screen was removed from the oil sump and was not obstructed. The vacuum pump was removed from the accessory section of the engine and disassembled. The rotor and vanes remained intact, and the drive splines were intact.

The airplane was equipped with a two-blade, fixed pitch propeller. Tip tearing, chordwise scratching, and S-bending was noted on the propeller. Furthermore, a branch, about 2 inches in diameter, that was cut at a 45° angle was located in the vicinity of the main wreckage.

Preliminary weather radar information indicated that the flight track entered an area of very light intensity precipitation echoes around 1330 at 1,100 ft and continued maneuvering on a westerly heading while remaining in light intensity echoes for the remainder of the flight.

According to Federal Aviation Administration records, the pilot held a private pilot certificate. He did not hold an instrument rating. According to the pilot's logbook, he accumulated about 66 hours of total flight time. Furthermore, he recorded 1 hour of instrument flight time and 2.2 hours of simulated instrument flight time.

#### Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7806W
Model/Series:	PA-28-180 NO SERIES	Aircraft Category:	Airplane
Amateur Built:			
Operator:	On file	Operating Certificate(s) Held:	None
Operator Designator Code:			

### Meteorological Information and Flight Plan

Conditions at Accident Site:	IMC	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>	GNV,134 ft msl	Observation Time:	13:53 Local
Distance from Accident Site:	10 Nautical Miles	Temperature/Dew Point:	20°C /18°C
Lowest Cloud Condition:	Few / 1300 ft AGL	Wind Speed/Gusts, Direction:	11 knots / 18 knots, 40°
Lowest Ceiling:	Broken / 1800 ft AGL	Visibility:	2 miles
Altimeter Setting:	30.18 inches Hg	Type of Flight Plan Filed:	NONE
Departure Point:	Orlando, FL (ISM)	Destination:	Keystone Heights, FL (42J)

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	29.525833,-82.283056

#### Administrative Information

Investigator In Charge (IIC):	Gibson, Kurt
Additional Participating Persons:	Jennifer Viteritto; FAA/FSDO; Orlando, FL Bob Martellotti; Piper Aircraft; Vero Beach, FL
Investigation Class:	Class 3
Note:	