

**Wreckage Examination
NTSB Accident Number
ERA22FA418**

ACCIDENT

Location:	Afton, VA
Date:	September 14, 2022
Time:	2300 EDT
Aircraft:	Piper PA-32-300
Registration	N2104J

PARTICIPANTS (On Scene)

Robert J Gretz
Sr. Air Safety Investigator
National Transportation Safety Board
Eastern Region Aviation

Mark Jennings
Aviation Safety Inspector
FAA Richmond FSDO

Jonathan Hirsch
Air Safety Investigator
Piper Aircraft
Vero Beach, FL

David Harsanyi
Air Safety Investigator
Lycoming Engines
Williamsport, PA

HISTORY OF FLIGHT

On September 14, 2022, about 2300 eastern daylight time, a Piper PA-32-300, N2104J, was destroyed when it was involved in an accident near Afton, Virginia. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

According to the airport manager at Blue Ridge Airport (MTV), Martinsburg, Virginia, the pilot diverted to MTV uneventfully on September 10, 2022, due to weather. He purchased 72 gallons of fuel and returned to Pennsylvania on a commercial flight. On the day of the accident, the pilot retrieved his airplane with the intention of flying back to his home airport, Smoketown Airport (S37), Smoketown, Pennsylvania.

According to preliminary information from the Federal Aviation Administration (FAA), the airplane was in cruise flight at 7,500 ft mean sea level when the pilot reported a rough running engine, followed by a

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total loss of engine power. The pilot attempted to glide the airplane to Charlottesville-Albermarle (CHO), Charlottesville, Virginia, but the airplane impacted wooded terrain about 15 miles southwest of CHO.

PERSONNEL INFORMATION

Pilot information provided to NTSB IIC by FAA inspector Mark Jennings.

AIRCRAFT INFORMATION

The airplane was manufactured in 1979 and equipped with a Lycoming IO-540, 300-hp engine, driving a two-bladed Hartzell constant speed propeller. A request was made to the pilot's family for aircraft log-books.

METEOROLOGICAL INFORMATION

KCHO 150253Z 27004KT 10SM CLR 18/15 A3015

COMMUNICATIONS

FAA ADS-B and communication data requested.

FLIGHT RECORDERS

N/A

WRECKAGE AND IMPACT INFORMATION

An approximate 100-ft debris path was observed, extending on a 60° magnetic course, consisting of severed trees at a downward angle of approximately 45°. The wreckage came to rest upright, oriented on a magnetic heading of 240°. The cockpit and cabin were consumed by fire. The fuel selector valve exhibited thermal damage and was positioned to the left main fuel tank. The fuel strainer bowl was thermally damaged, and the fuel strainer screen was destroyed. Flight control cable continuity was continuous from the cockpit to each of the respective control surfaces except for a separation in each of the rudder cables consistent with impact forces. The propeller remained attached to the crankshaft propeller flange. Both propeller blades remained in the hub. One blade appeared straight and undamaged. The other blade was bent aft about 90°. The spinner was crushed on one side.

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The left wing was located on the left side of the fuselage and appeared to be displaced slightly forward. The main spar was bent and twisted consistent with impacting trees. The majority of the wing was consumed. The flap and aileron remained attached to the wing and were impact and thermally damaged. The right wing was located on the right side of the fuselage and appeared to be displaced slightly aft. The majority of the wing was also consumed by fire. The flap and aileron remained attached to the wing and were impact and thermally damaged. The empennage remained intact. The leading edge of the vertical stabilizer exhibited thermal damage and discoloration. The rudder remained attached by its hinges and exhibited impact damage on the trailing edge consistent with tree impact. The stabilator and stabilator trim remained intact. The stabilator trim jackscrew was extended about nine threads above the drum, which corresponded to a partial nose up trim setting.

The engine was subsequently examined at a recovery facility. The crankshaft could not be rotated by hand. Removal of the rear accessory case housing revealed fragments of connecting rod cap on top of the oil sump baffling. Removal of the oil sump revealed about 1 quart of oil remaining in the sump with additional metal fragments. The Nos. 1 and 2 cylinders were removed and their respective connecting rods remained intact. The remaining four cylinders could not be removed from the engine case. An access hole was cut through the oil sump baffling to facilitate visual examination. The remaining four connecting rods had fractured. The visual examination revealed that the crankshaft remained intact. The engine was retained for further examination.

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MEDICAL AND PATHOLOGICAL INFORMATION

TBD.

WITNESS STATEMENTS AND CONTACT INFORMATION

N/A

ADDITIONAL INFORMATION

Wreckage Recovery: Anglin Aircraft Recovery