



## NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety  
Washington, D.C. 20594

October 15, 2021

# EXAMINATION SUMMARY

**ERA22FA014**

### A. ACCIDENT

Location: Blairsville, Georgia  
Date: October 13, 2021  
Time: 0816 EDT  
Airplane: Piper PA-24-260, N9126P

### B. INVESTIGATION PARTICIPANTS

Ralph E. Hicks - IIC  
Eastern Region Aviation (ERA)  
National Transportation Safety Board  
Marietta, Georgia

Jonathan Hirsch  
Air Safety Investigator  
Piper Aircraft  
Vero Beach, Florida

John Pless  
Principal Maintenance Inspector  
FAA Atlanta FSDO  
Atlanta, Georgia

James Childers  
Senior Flight Safety Investigator  
Lycoming Engines  
Williamsport, Pennsylvania

## C. SUMMARY

On October 13, 2021, about 0816 eastern daylight time, a Piper PA-24-260, N9126P, was destroyed when it was involved in an accident at Blairsville, Georgia. The private pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The instrument-rated pilot, who owned the airplane, filed an instrument flight rules flight plan from Blairsville Airport (DZJ) to Sebring Regional Airport (SEF), Sebring, Florida. According to preliminary Automatic Dependent Surveillance – Broadcast (ADS-B) data, the pilot took off on runway 8 about 0815 and immediately commenced a left turn to the northwest to a heading of about 300° at which point the airplane began a right turn before the ADS-B data ended.

Takeoff minimums and obstacle departure procedures for DZJ (an uncontrolled airport) required pilots to climb in visual conditions to cross the airport at or above 4,500 ft msl before proceeding on course. Weather minimums for the climb in visual conditions were 2,700 ft ceiling and 3 miles visibility. The DZJ weather at 0815 included a ceiling of 200 ft overcast with ¼ mile visibility in fog. Witnesses and first responders reported heavy fog conditions at the accident site.

### 1.0 Wreckage Examination

The examination of the wreckage was performed at the accident site, Blairsville, Georgia, on October 13-14, 2021, and at the facilities of Atlanta Air Recovery, Griffin, Georgia, on October 15, 2021.

#### General

Initial examination of the accident site and wreckage revealed that all major structural components of the airplane were accounted for. The aircraft impacted trees and terrain on a heading of 090° about 1.5 NM north of the departure end of runway 8 at DZJ. The main wreckage came to rest on the banks of Nottely Lake in Blairsville. The measured descent angle from the tree breaks to the initial impact crater was 22°. There was no fire.

#### Fuselage

During the on-scene examination of the wreckage, paint chips were noted at the base of a large tree about 250' west of the main wreckage. Fragments of the windshield and side windows were scattered along the debris path along with the outboard portion of the right wing, the right aileron, the glareshield, the outboard portion of the left wing, and other small fragments of the aircraft. An initial impact crater was observed at the waterline of a small cove on the lake. The main portion of the wreckage was located on the shore of the lake a few feet east of the initial impact crater and the aircraft was inverted. The fuselage and cabin area forward of the wings were fragmented and destroyed by the impact forces. The front seats were separated from their

seat tracks and from the main wreckage. The nose landing gear was impact-damaged and the surrounding structure was fragmented so that its position could not be determined. The left side wall of the cabin was mostly separated from the fuselage and located adjacent to the main wreckage. Primary flight control cable continuity was established from the cockpit to the control surfaces. The fuel strainer bowl appeared intact and was removed by the Piper investigator to facilitate examination of the fuel strainer screen. The screen contained some dark colored granular debris of unknown composition. No fuel was observed in the strainer bowl.

During the post-recovery examination of the wreckage, the fuel selector handle was observed in an intermediate position, close to the Left Main position. The handle could be rotated and detents were observed at each position. Electrical power was applied to the electric fuel pump and it appeared to operate normally. The attitude indicator, directional gyro, and electric turn coordinator were extracted from the wreckage and opened to examine the gyros. No scoring was observed on any of the gyros or their respective housings.

### Left Wing

During the on-scene examination of the wreckage, the left wing was broken near the wing root and folded over onto the right wing. The left wing exhibited impact damage consistent with multiple tree strikes resulting in separation of portions of the wing forward of the main spar and the outboard end forward of the aileron. The main spar was bent aft about 90° beginning near Wing Station (WS) 90. The main landing gear was in the retracted position and impact damage to the wing prevented the landing gear from extending from the wheel well. The aileron cables were continuous to the bellcrank; however, one arm of the bell crank and been fractured and separated. The bellcrank remained partially attached to the wing, but the structure around the bellcrank was torn and separated. The pushrod from the bellcrank remained attached to a fragment of the aileron. One of the aileron bellcrank stops was intact and the other was fractured. The aileron was separated from the wing and torn chordwise near the inboard end. The flap remained attached to the wing and exhibited impact damage along its length. The pitot mast remained attached to the wing. The lift detector in the leading edge was impact damaged. Both fuel cells were separated from the wing and shredded. The fuel filler necks were located in the debris field; however, the fuel cap was missing from one of the openings and not located.

### Right Wing

During the on-scene examination of the wreckage, the right wing exhibited impact damage consistent with multiple tree strikes resulting in separation of portions of the wing forward of the main spar and the outboard end forward of the aileron. The main landing gear was in the extended position. The aileron cables were continuous to the bellcrank fittings, however one arm of the bell crank was fractured and separated and one turnbuckle eye bolt was fractured. The bellcrank remained partially attached to the wing but the structure around the bellcrank was torn and separated and was located in the debris field. The aileron was separated from the wing and was located in a tree along the debris path. The flap was torn and separated chordwise about mid-span. The inboard portion of the flap remained attached to the wing. The outboard portion of the flap was separated from the wing. The inboard (main) fuel cell was impact damaged and torn and no fuel was observed. The outboard (auxiliary) fuel cell was separated from the wing and

shredded. The fuel filler necks were located in the debris field; however, the fuel cap was separated from its filler neck opening.

## Empennage

During the on-scene examination of the wreckage, the tailcone was crumpled and bent in several locations. The empennage was inverted so that the tip of the vertical stabilizer was on the ground. The rudder remained attached to the vertical stabilizer. The stabilator remained attached to the tailcone and the stabilator trim tab remained attached by its hinge. The stabilator trim jack screw was extended above the drum about 3/16" (no threads exposed) which corresponds to a partial aircraft nose down trim setting.

## Engine and Accessories

The engine was examined at the facilities of Atlanta Air Recovery. The propeller remained attached to the engine crankshaft flange. The propeller governor was impact separated from the engine. The starter ring gear support and the starter ring gear were impact damaged. The #2 and #4 cylinder heads were impact damaged. The alternator was impact separated from the engine. The induction tubing, exhaust tubing and the exhaust mufflers were impact damaged. The oil sump was impact damaged. The carburetor was fractured across the throttle bore and separated from the engine. The engine driven fuel pump was fractured and partially separated from the engine. The oil filter assembly was separated from the engine.

The engine was suspended from a lift and partially disassembled to facilitate the examination. The crankshaft was rotated by turning the propeller and continuity of the crankshaft to the rear gears and the valve train confirmed. Compression and suction were observed from all six cylinders. The interiors of the cylinders were observed using a lighted borescope and no anomalies noted.

The fuel injector servo was impact separated from the engine and damaged. The throttle cable was separated from the servo throttle arm at the arm attach ball. The arm was bent and the idle/full throttle stop pin broken off. The mixture control shaft was broken off and the arm separated from the servo. The fuel inlet fitting was separated from the servo and the screen impact damaged and exposed to the elements. The screen was cut to see inside and observed unobstructed. The fuel regulator section cover brass plug was secure and marked "G". The servo was partially disassembled and no damage to the rubber diaphragms or other internal parts noted. The fuel flow divider remained attached to the engine and was impact damaged. One of the fuel injector line fittings was broken off. The flow divider was partially disassembled and no damage to the rubber diaphragm or other internal parts noted. The "GamiJector" fuel injector nozzles remained attached to the engine cylinders. Blue stains were observed around the #1 nozzle. All 6 nozzles were unobstructed. The engine driven fuel pump was impact fractured and the valve body separated from the base. The valve body was disassembled and no damage other than impact damage noted.

Both magnetos remained attached to the engine. No damage to the magnetos was noted but the ignition harnesses of both magnetos were damaged. Both magnetos produced spark from all ignition towers when rotated by hand.

The spark plug electrodes exhibited gray to dark gray coloration and worn normal condition. Soil was observed in the #3 top, #5 top and #5 bottom electrode wells. The #3 and #5 bottom spark plug electrodes were oil soaked.

The vacuum pump remained attached to the engine. It was removed and partially disassembled. The composite drive assembly, carbon rotor and carbon vanes were observed intact.

Oil was observed in the engine. The oil sump was impact damaged. The oil cooler was impact damaged. The oil suction screen and oil filter media were absent of metallic debris.

### Propeller

The propeller remained attached to the engine crankshaft flange. The propeller spinner was fragmented. The propeller dome was partially crushed. One propeller blade was bent aft about 30° at about mid-span. That blade exhibited leading edge gouges, chord-wise scoring and longitudinal twisting toward the blade face. The other blade was turned about 90° in the hub and curved aft about 30°. That blade exhibited leading and trailing edge gouges, chord-wise scoring and longitudinal twisting toward the blade face.

The propeller governor was fractured across the base and separated from the engine. The governor control arm was separated from the governor. The governor oil screen was exposed to the elements. No metallic debris was observed on the screen. The governor drive was rotated by hand.