



Summary of Findings

RIGHT ENGINE EXAMINATION

NTSB ACCIDENT NUMBER: ERA20LA206

AIRCRAFT REGISTRATION: N135VE

OPERATOR: Individual

ACCIDENT LOCATION: Eatonton, Georgia

Investigative Team:

NTSB IIC: Leah

FAA Coordinator: David Detscher, ATL FSDO

Party Member(s):

Jonathon Hirsch, Piper Aircraft

Technical Advisor:

Andre Spits, PW&C

Summary of Events:

On June 5, 2020, about 1520 eastern daylight time, a Piper PA-31T, N135VE, was destroyed when it was involved in an accident near Eatonton, Georgia. The two pilots and the three passengers were fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

A review of air traffic control communications (ATC) and radar data provided by the Federal Aviation Administration (FAA) revealed that the airplane was on a northerly heading en route to New Castle Henry County Marlatt Field (UWL) New Castle, Indiana, at an altitude of 25,000 ft mean sea level (msl).

When the airplane was about 50 miles south of Eatonton, Georgia, one of the pilot's told ATC that he was deviating "to the right a little" to avoid weather. When the airplane passed over Eatonton, one of the pilot's advised ATC that they wanted to proceed direct to their destination on a 353° heading, and ATC approved. This was the last communication between ATC and the airplane. About a minute later, the airplane was observed on radar entering a right turn, followed by a rapid descent. Radar contact was lost about 1520. There were no distress calls made by either pilot.

Several witnesses observed the airplane as it was descending and took video with their cell phones. A review of these videos revealed the airplane was spinning as it descended, was on fire and trailing black smoke.

The main wreckage of the airplane impacted densely wooded terrain inverted. The airplane continued to burn and the cockpit, fuselage, empennage, inboard sections of both wings and the right engine sustained extensive fire damage. The outboard sections of both wings and the tail section had separated from the airplane as it descended and were located within 3 miles of the where the main wreckage came to rest. The left engine also separated and was never located.

The right engine was examined under the supervision of the National Transportation Safety Board on April 27-28, 2021, at Atlanta Air Recovery, Griffin, Georgia.

RIGHT HAND (RH) ENGINE

Engine Model: PT6A-135, Serial No.: 92030

Time Since New (TSN): 6573.2

Time Since Overhaul (TSO): 2615.3

RIGHT HAND (RH) PROPELLER

Propeller Model: MTV-27-1-E-C-F-R (P), Serial No.: 191490

The engine was recovered with the five-bladed composite propeller system, airframe cowlings and airframe exhaust ducts still attached. The engine sustained extensive impact and thermal damage. All five blades separated near the hub. A total of six blades were recovered, but it could not be determined which blades went to the right engine.

The cowlings were removed, and a borescope was used to internally examine the engine. Damage was noted to the tips of the power turbine blades, but there was no evidence of rotational scoring.

A portion of the engine inlet case, the oil tank and accessory gearbox (AGB) housing were fractured and consumed by fire exposing several AGB internal gears.

The power control linkage and reversing linkage were bent and mangled. Examination of the pneumatic lines revealed that the compressor discharge air line and P3 filter were normal. The power turbine control (Py) line was bent and mangled.

The engine chip detector was removed and was absent of debris.

The fuel filter was absent of debris.

Examination of the compressor section revealed the first-stage compressor blades were not damaged/distressed. The reduction gearbox appeared normal, and the fuel control unit and fuel pump sustained impact and fire damage.

Examination of the engine did not reveal any preimpact anomalies that would have precluded normal operation had its fuel source (wing section that housed the fuel tank), not separated from the right wing in flight.