

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN23LA166

AIRCRAFT EXAMINATION NOTES

March 15, 2024

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A. ACCIDENT

Location: Columbia, MS
Date: April 24, 2023
Time: 1900 cdt
Airplane: N44048

B. AIRCRAFT EXAMINATION NOTES

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C. SUMMARY

On April 24, 2023, about 1900 central daylight time, a Protech PT2 airplane, N44048, was substantially damaged when it was involved in an accident near Columbia, Mississippi. The pilot was not injured. The airplane was operated as a Title 14 Code of Federal Regulations Part 91 personal flight.

The pilot reported that during a local pleasure flight, while in cruise flight about 1,000 ft above ground level, the airplane's engine lost all power. He attempted to restart the engine, checking throttle, mixture, carburetor heat, and switching on the other fuel tank. He noted that he also attempted to use the engine primer to restart the engine. All attempts were not successful, and he prepared for an off-airport landing. He noted that there was a clearing farther along his flight path, but he did not have enough altitude to reach the clearing and elected to land on a gravel road. During the landing approach he saw a powerline and maneuvered to avoid it but struck a pine tree. The airplane came to rest in a nose down position among the trees and sustained substantial damage to both wings and the fuselage.

D. DETAILS OF THE EXAMINATION

1.0 Accident Site

The accident site was not visited during the examination.

2.0 Airframe Examination

The fuselage, tail surfaces and engine were present for the examination. The wings had been removed and were not available for examination.

2.1 Fuselage

The fuselage was predominately intact with bending of some of the tube fuselage structure.

2.2 Empennage

The tail surfaces were still attached to the fuselage and were predominately intact. There was some impact bending of

2.3 Wings

The wings were not available during the examination.

2.4 Landing Gear

The landing gear was intact and appeared undamaged.

2.5 Fuel/Fuel System

Each wing had a single fuel tank installed but were not available during the examination. The fuel hoses from the wing and the remainder of the fuel system was still present in the fuselage. The fuel lines from each wing tank had an automotive fuel filter installed. Those fuel lines then led to a fuel selector valve, then to a gascolator mounted on the firewall, and then to the engine. Examination of the fuel system revealed no anomalies except that the automotive fuel filters near the wing tanks were obstructed. They were tested by removal and blowing through them with lung pressure. Almost no air could be blown through the filters. The pilot/owner was present during the exam. When asked when the filters were last checked or changed he said that he did not know and that they may have been there for 20 year or more.

2.6 Other Systems

Movement of the cockpit controls resulted in movement of the tail surfaces and pushrod for the ailerons.

3.0 Engine Examination

The engine rotated freely after removal of the top spark plugs. Compression and suction was verified on all cylinders during rotation. Removal of the front cylinder rocker covers verified movement of the valves during engine rotation. The left impulse coupled magneto produced spark on all leads. Since no propeller was installed, the engine could not be rotated fast enough to produce spark of the right non-impulse coupled magneto. The carburetor was removed and the fuel bowl removed. No sediment was visible inside the bowl. The accelerator pump seal was

worn but would not have prevented normal operation. No anomalies were found with respect to the engine or carburetor.

4.0 Propeller Examination

The airplane's propeller had been removed and was not available during the examination.

Submitted by:

John Brannen
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