

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN24LA210

AIRCRAFT EXAMINATION

March 20, 2024

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A. ACCIDENT

Location: Patterson, LA
Date: 2/25/2024
Time: 1645 CDT
Airplane: Amateur-built Pulsar 1, N72BH

B. AIRCRAFT EXAMINATION

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Party Coordinator	Jordan Paskevich Rotec Flight Safety, Inc. Vernon BC, Canada

C. SUMMARY

On February 25, 2024, about 1645 central standard time, a Pulsar 1 airplane, N72BH, was destroyed when it was involved in an accident near Patterson, Louisiana. The pilot received serious injuries. The airplane was operated as a Title 14 Code of Federal Regulations (CFR) Part 91 personal flight.

The pilot had recently purchased the airplane and the accident flight was the first flight after the purchase. Shortly after takeoff, the airplane's engine lost all power and the pilot attempted to land the airplane in an open area on airport property. During the attempted landing, the airplane struck a fence and impacted the ground. A postimpact fire ensued and destroyed the airplane.

D. DETAILS OF THE EXAMINATION

1.0 Accident Site

The accident site was not visited. Photos from the accident site were provided by the FAA. The airplane came to rest on airport property adjacent to a taxiway. A chain-link fence at the airport perimeter was struck by the airplane and the outboard portion of the left wing was found next to the fence. The airplane was resting upright on its belly. The tail surfaces and their respective control surfaces were still attached to the aft fuselage. The fuselage from the firewall aft to the forward end of the vertical stabilizer dorsal fin was almost completely consumed by the postimpact fire. The left wing was almost completely consumed by the fire. The right wing inboard portion

was consumed by fire, but the spar and leading edge were continuous to the root with fire damage.



Figure 1. FAA photo of the airplane viewed from its left side.



Figure 2. FAA Photo of the airplane viewed from its front left side.



Figure 3. FAA Photo of the airplane viewed from the front.

2.0 Airframe Examination

Examination was conducted on March 12, 2024. To the extent possible, the airplane's flight control system was examined. The aileron and elevator control systems consisted of push-pull controls. The right wing aileron push-pull rod was melted at the inboard end but otherwise intact. The left aileron push-pull rod was broken at the outboard end. The break was consistent with overload failure. The inboard end was melted. The elevator pushrod was melted in the cockpit area. The rudder cables were intact from the cockpit to the rudder.

2.1 Fuselage

The fuselage had extensive fire damage. The fuselage from the firewall to aft of the cockpit was destroyed by the postimpact fire. Examination was limited to determination to the extent possible of the flight controls. See "Other Systems" section below.

2.2 Empennage

The airplane's tail surfaces remained attached to the aft fuselage. The elevators and rudder remained attached to their respective fixed surfaces. There did not appear to be any impact damage to the tail surfaces.



Figure 4. NTSB photo of the airplane's tail surfaces.

2.3 Wings

The airplane's wings were of wood construction. There was extensive fire damage to the inboard end of the wing. The portion of the right wing aft of the spar was more extensively damaged by fire. The aileron remained attached to the wing.

The burned flap could be see in photos resting in its usual position at the aft inboard end of the wing.



Figure 5. FAA Photo of the airplane's right wing at the accident site.

The outer aft portion of the left wing, including the aileron was separated from the remainder of the wing. These pieces were found next to the airport perimeter fence. The aileron was still attached to the portion of wing structure and the leading edge "D-cell" was found near the fence. The remainder of the wing, including the flap, was almost completely consumed by fire



Figure 6. FAA Photo of the airplane's inboard left wing. Also visible is the separated main landing gear.



Figure 7. FAA Photo of the outboard aft portion of the left wing with aileron still attached.

2.4 Landing Gear

Both the main and nose landing gear separated from the airframe. The main gear was found adjacent to the airplane's left wing at the accident site.

2.5 Cockpit

The cockpit area of the fuselage was almost completely consumed by fire.

3.0 Engine Examination

The engine was examined on March 12, 2024. The Engine was separated from the airplane. With the exhaust system removed the pistons were visible. The No. 2 piston had scoring on its side when viewed through the exhaust port. The No. 2 cylinder was removed and the scoring and evidence of seizure was confirmed with additional areas of scoring adjacent to the intake ports. The interior of the cylinder, the exterior of the connecting rod, and portions of the crankshaft within the No. 2 cylinder side of the engine were covered with a coating of corrosion (rust).



Figure 8. Rotec Photo of cylinder.



Figure 9. Rotec Photo of connecting rod and crankshaft.



Figure 10. Rotec photo of connecting rod and crankshaft.

4.0 Propeller Examination

The wood propeller remained attached to the engine propeller flange. One blade was broken. The broken blade was found in the remainder of the debris during the examination.

5.0 Pilot Information

FAA reported that the pilot did not have a pilot certificate. The inspector said that he previously had a student pilot certificate but it had been revoked many years prior due to the pilot carrying passenger while only having a student certificate.

6.0 Aircraft Information

The airplane was a amateur-built single seat airplane with a low mounted single wing. It had tricycle landing gear. The wing was of wood construction and the fuselage was composite.

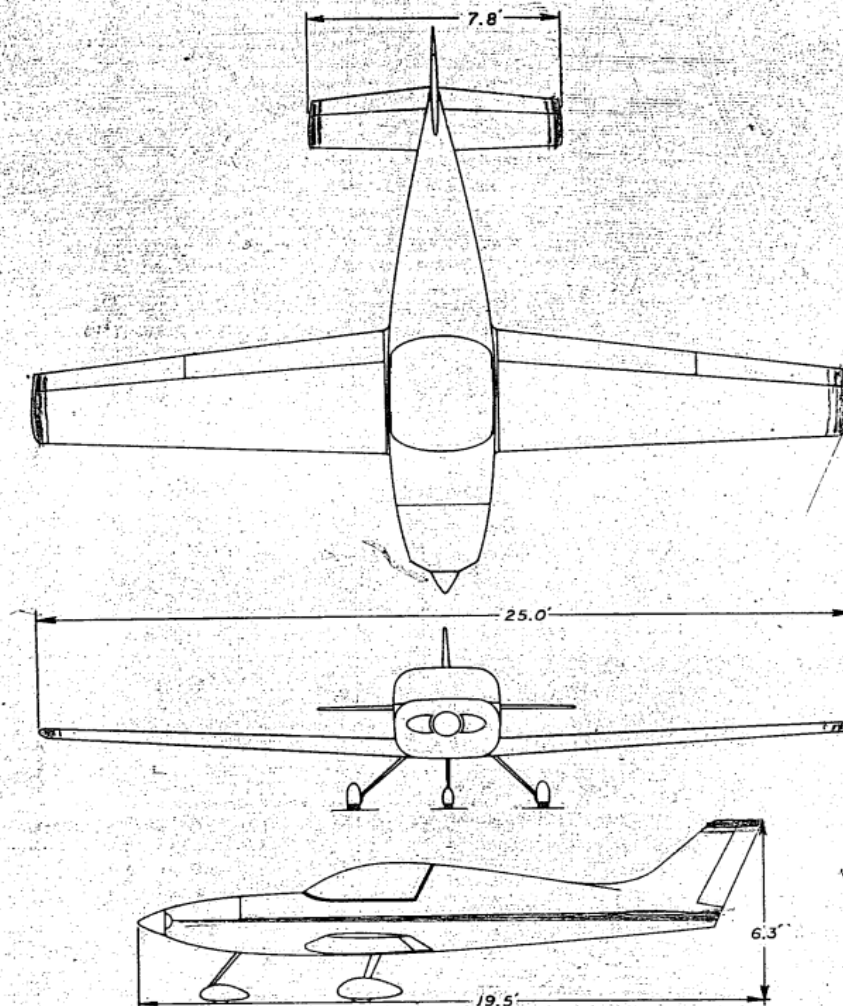


Figure 11. Airplane 3-view from FAA Airworthiness file.

7.0 Meteorological Information

METAR KPTN 252256Z AUTO 20011KT 10SM CLR 21/11 A3010 RMK AO2
SLP195 T02060111 \$=

Submitted by:

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NTSB IIC