

**NATIONAL TRANSPORTATIONS SAFETY BOARD
Office of Aviation Safety
Washington, DC 20594**

SUMMARY OF AIRCRAFT EXAMINATION

-- CEN21LA200 --

A. ACCIDENT

Location: Richmond, Indiana
Date: April 25, 2021
Time: 0742 eastern daylight time
Aircraft: Aeropro CZ A240 (s/n 29309), N417R

B. PARTICIPANTS

Timothy Sorensen
Sr. Aviation Accident Investigator
National Transportation Safety Board
Denver, Colorado

Jordan Paskevich
Chief Accident Investigator
Rotech Flight Safety Inc.
Vernon, BC, Canada

C. ACCIDENT SUMMARY

On April 25, 2021, at 0742 eastern daylight time, an Aeropro CZ A240 light sport airplane, N417R, was destroyed when it was involved in an accident near the Richmond Municipal Airport (RID), Richmond, Indiana. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

D. DETAILS OF AIRCRAFT EXAMINATION

The NTSB did not respond to the accident site. The airplane was recovered to a hangar at the Richmond Airport following the accident. A post-recovery engine examination was conducted by the NTSB investigator-in-charge on August 3, 2021.

Summary of Aircraft Examination

E. DESCRIPTION OF ACCIDENT SITE

The airplane impacted an open field about 1/2 mile south-southwest of the airport. It came to rest upright on a west-northwest heading. A postimpact fire consumed the fuselage, empennage, and inboard wings with exception of the tubular airframe structure. The fuselage and wing structure were deformed consistent with impact forces. All airframe structure was located in position consistent with impact of a structurally intact airplane.

F. SUMMARY OF EXAMINATION¹

Airframe – Aeropro CZ A240 (s/n 29309)

The forward fuselage, with the engine and propeller attached, were separate from the remainder of the fuselage at the time of the examination. The forward fuselage and cockpit area were deformed consistent with impact forces.² The control sticks and rudder pedals remained attached to the respective torque tubes; all were deformed. The control linkage and cables remained secured to the corresponding torque tubes; however, all were separated aft of the cockpit area consistent with impact, post-impact fire, or recovery efforts. The cockpit instrumentation was destroyed consistent with the post-impact fire.

The fuselage and empennage fabric were consumed by the post-impact fire exposing the airframe structure. The center fuselage structural tubing was deformed. The aft fuselage and empennage structural tubing appeared intact. The elevator and rudder frames remained attached to the stabilizers. The elevator control tube and the rudder control cables remained attached to the control surfaces and were continuous to the center fuselage.

The inboard portion of both wings exhibited fire damage with the fabric consumed. The wing structure exhibited aft crushing damage. The wing struts remained secured to the wings and fuselage.³ The ailerons remained attached to the wings. The fuel tanks were breached and partially consumed.

The left landing gear remained attached to the airframe and exhibited post-impact fire damage. The right landing gear was separated at the inboard strut fitting consistent with overstress fracture. It was recovered at the accident site and did not exhibit any fire damage.

Engine – Rotax 912ULS (s/n 5652457)

The engine remained attached to the engine mount and firewall. The engine was damaged consistent with impact and the post-impact fire. No anomalies consistent with a pre-impact failure were observed with respect to the cylinders or pistons. Borescope examination did not reveal any anomalies related to the crankshaft. The carburetors were separated from the intake manifold consistent with impact forces, and partially consumed by the post-impact fire. The ignition module and harness exhibited fire damage and could not be tested. The engine-driven and electric fuel pumps were damaged and could not be tested. The oil cooler, oil pump oil lines, and multiple fuel lines could not be

¹ Directions related to accident site placement and component damage/deformation are with respect to an intact airframe unless otherwise noted.

² The forward fuselage was located in place relative to the airframe at the accident site.

³ Each wing strut was cut presumably to facilitate recovery.

Summary of Aircraft Examination

evaluated due to post-impact fire damage. Similarly, the cooling system was damaged and could not be evaluated. The exhaust system was deformed consistent with impact; otherwise, no anomalies were observed.

The propeller hub remained secured to the gearbox. The composite propeller blades were partially consumed by the post-impact fire. The gearbox could not be rotated by hand consistent with accident-related damage. The magnetic plug did not contain any unusual material or contamination.

----- *end of summary* -----