

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN23FA174

EXAMINATION SUMMARY

May 10, 2023

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A. ACCIDENT

Location: Victor, Colorado
Date: May 6, 2023
Time: 1000 mountain daylight time
Aircraft: Pool-Cessna, N15188

B. PARTICIPANTS

Investigator-in-Charge (IIC)	Timothy Sorensen ¹ Aviation Accident Investigator National Transportation Safety Board Denver, Colorado
Investigator	Zane Brown ^{1,2} Air Safety Investigator National Transportation Safety Board Denver, Colorado
Investigator	Brian Rutt ² Air Safety Investigator National Transportation Safety Board Denver, Colorado
Party Representative	Travis Novak ² Aviation Safety Inspector Federal Aviation Administration Denver, Colorado

C. ACCIDENT SUMMARY

On May 6, 2023, about 1000 mountain daylight time, a Pool-Cessna airplane, N15188, was destroyed when it was involved in an accident near Victor, Colorado. The pilot and 3 passengers were fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

An on-scene examination was conducted on May 8, 2023, by the NTSB with the assistance of the FAA. Engine and propellers examinations were conducted on September 9, 2024, by NTSB investigators.

¹ Present for and participated in the on-scene examination.

² Present for and participated in the follow-up engine and propeller examinations.

D. EXAMINATION SUMMARY

1.0 Accident Site

The accident site was located in mountainous terrain about 15 miles north of the departure airport. The airplane impacted trees and terrain on an approximate 300° course. The main wreckage was located at 38.65056 / -105.08806 and consisted of the fuselage, left wing, empennage, engine, and propeller. The outboard portion of the right wing was separated and suspended in a tree about 35 ft southeast of the main wreckage. The elevation at the site was about 9,170 ft. Multiple fresh tree breaks were observed with one tree approximately 12 inches in diameter.

2.0 Airframe Examination³

Pool-Cessna (s/n T-41B2)⁴

The airplane came to rest inverted and a postimpact fire ensued. A majority of the fuselage was consumed, and the cockpit instruments were destroyed. The cockpit control wheels were consumed. The control column (T-bar) was dislocated from the support structure and discolored consistent with the post-impact fire. The aileron control cables remained intact at the column and were dislocated from the control wheel sprockets. The elevator cables remained intact and were securely attached to the lower portion of the control column. Similarly, the rudder pedals were dislocated from the support structure and exhibited thermal damage. The rudder control cables remained secured to the rudder torque tubes.

The left wing was located with the main wreckage. The inboard and outboard portions of the wing were damaged consistent with the fire. The wing exhibited denting and deformation consistent with impact. The left-wing strut separated near the lower end. The upper and lower segments of the strut remained secured to the wing and the fuselage attachment points, respectively. The left aileron was attached. Left aileron control continuity was confirmed. The bellcrank and control rod were intact. The control and balance cables remained attached at the bellcrank. The control cable was continuous to the cockpit control column (T-bar). The balance cable was separated near the fuselage centerline. The cable separation was frayed consistent with overload failure.

The outboard portion of the right wing was separated near the root and was suspended in a tree about 35 ft southeast of the main wreckage. The wing section exhibited aft crushing damage over the entire span. The right aileron remained attached. Control cable separations appeared consistent with overload. The right

³ Directions related to accident site placement and component damage/deformation are with respect to an intact airframe unless otherwise noted.

⁴ According to Federal Aviation Administration (FAA) records, the airplane was assembled from spare parts and certificated in the experimental-exhibition category in April 2012. Based on the original data plate information, the airplane was manufactured as a Cessna model R172E (s/n R172-0189) and sold to the U.S. Army as a model T-41B.

flap was separated at the hinges but retained by a control cable. The inboard portion of the right wing was located with the main wreckage which was consumed by the postimpact fire. The right fuel tank was dislocated from the wing, deformed consistent with impact, and partially consumed by the postimpact fire. The fuel cap was securely installed. The right-wing strut was separated. The lower portion remained secured to the fuselage attachment point and exhibited thermal damage.

The empennage exhibited impact and fire damage. The rudder and elevators remained attached to the vertical and horizontal stabilizers, respectively. The rudder bellcrank was structurally intact. The control cables remained attached to the bellcrank and were continuous to the cockpit rudder torque tubes. The elevator torque tube and bellcrank were intact. The bellcrank was securely attached to the aft fuselage bulkhead. The elevator control cables remained attached to the bellcrank and were continuous to the cockpit control column.

3.0 Engine Examination

Continental IO-360-D (s/n 62363-70-D-R)

The engine remained attached to the engine mounts and firewall. The engine mount was fractured in multiple locations consistent with impact forces. The throttle quadrant was destroyed by impact and fire damage.

The engine exhibited damage consistent with both the impact sequence and the post-impact fire. Internal engine and valve train continuity were confirmed via rotation of the crankshaft. Compression and suction were obtained on all cylinders.

Both magnetos sustained damage consistent with impact and the post-impact fire. The right magneto was partially separated from the engine. The components could not be tested due to the damage. The spark plugs were intact, secure, and exhibited normal combustion signatures. The fuel injectors were secure and, when removed and examined, clear of any debris. The oil filter was secure, and the media was unremarkable.

The engine driven fuel pump was damaged and could not be tested. The damage was consistent with impact forces, and the component was otherwise unremarkable.

The propeller governor appeared intact. The input drive and control arm appeared to be operational. The unit was not examined further. The propeller control cable remained attached to the governor control arm.

The throttle and mixture control cables were separated consistent with impact.

4.0 Propeller Examination

McCauley 2A34C209-C (s/n 042499)

The propeller hub was secured to the engine propeller flange and was damaged consistent with impact forces. Both propeller blades were located with the engine. One blade remained secured to the hub. The blade tip was separated, and the remaining outboard portion of the blade was damaged due to the post-impact fire. The second blade was separated from the hub and located adjacent to the engine. Both propeller blades exhibited S-bending and chordwise gouging.

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