NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

October 16, 2021

ACCIDENT SITE EXAMINATION SUMMARY

WPR22FA011

This document contains 10 embedded images.

A. ACCIDENT

Location:	Reserve, New Mexico
Date:	October 15, 2021
Aircraft:	Cessna 175, N7584M
NTSB Investigator-in-Charge:	Maja Smith

B. SUMMARY

Examination of the accident site was conducted on October 15, 2021. All major structural components of the airplane were located at the accident site. The wreckage was recovered to a secure location for further examination.

C. DETAILS OF THE INVESTIGATION

1.0 Accident Site Examination

Main Wreckage: 33°35'47.32"N, 108°43'17.58"W– Elevation: 7,521 ft

The accident site was located near Russ Mountain in the Gila Mountains, New Mexico. Gila Mountains. The Gila Mountain range is located in southwest New Mexico, north of Silver City and east of Reserve. The accident site was located about 7 nautical miles south of Reserve, NM.

The first point of impact (FPOI) was identified as the top of a pine tree located about 100 ft downhill from the airplane wreckage. The tree height after the impact was estimated to be about 70 ft.

Two branches from the impacted trees found on the ground revealed signatures of propeller strikes.

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The airplane wreckage was located on about 090° bearing from the FPOI and came to rest on its left side. All components of the airplane remained attached to the airframe by their respective

attachment points except for the left wing that was folded upwards underneath the fuselage but remained attached by the control cables.

The airplane sustained impact damages consistent with a low-speed flight. The engine remained attached to the airframe by it mounts and the engine cowling remained secured. The nose gear remained attached to the airframe. The two-bladed Hartzell propeller remained attached to the hub and exhibited signatures of producing power upon impact. The oil dipstick was secured, and presence of oil was verified on the stick. Presence of oil was also noted on the bottom of the engine cowling.
Instrument panel revealed impact damages, but most gauges were readable; however, their accuracy could have been compromised as a result of the impact.

Figure 4. Partial view of instrument panel

The throttle lever was pushed in, carburetor heat lever was pulled out and the mixture lever was pull out and was set to lean. Levers were manipulated and associated movements were noted on the engine accessories. The ignition key was located in “both” position which indicated simultaneous use of left and right magnetos.

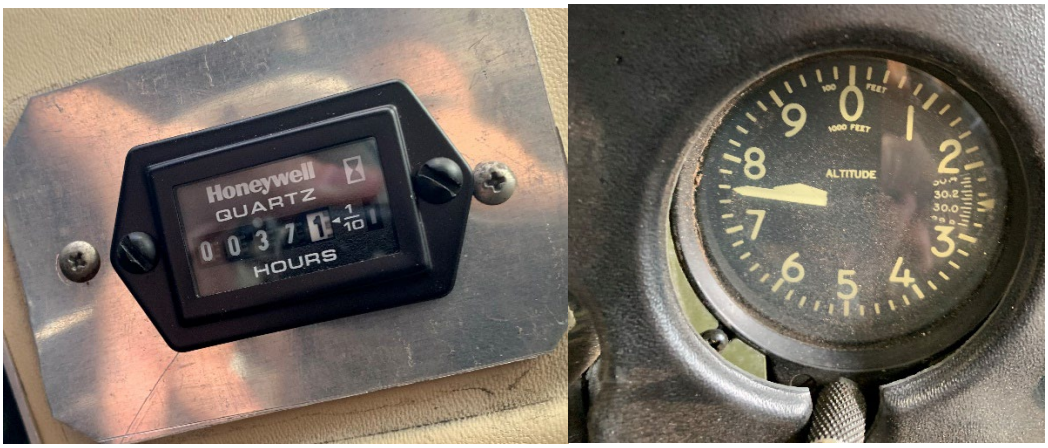

Figure 5. Hobbs meter and altimeter gauge

Hobbs meter indicated 371 hours, manifold pressure indicated 22.8 inHg and the altimeter indicated about 7,600 ft with the altimeter setting of 30.05.

The battery was installed and operational. Turning it on displayed last used radio communication frequencies.

Figure 6. Comm panel

Two front seats and the rear bucket seat remained attached to their respective installation points. Only lap belts were installed and, according to the first responders and survivors, were used during the flight.

Figure 6. ELT

The ELT was installed and found in OFF position.

The left wing exhibited impact damages along its leading edge; both flaps and ailerons remained attached to the wing. The flight control continuity was established through the wing to the crewstation.

Both horizontal and vertical stabilizers remained attached to the empennage; flight control continuity was established from the horn-balanced rudder and elevators. The elevator trim tab actuator indicated 1.4 in which corresponds to about 5° up.

The right wing remained attached to the airframe and exhibited impact damages along its leading edge; both flaps and ailerons remained attached to the wing. The flight control continuity was established through the wing to the crewstation.

Both main landing gear remained attached to the airframe.