



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

October 27, 2020

ONSITE EXAMINATION NOTES

WPR21FA025

A. ACCIDENT

Location: Cordes Lake, AZ
Date: October 24, 2020
Aircraft: N25NL
NTSB IIC: Joshua Cawthra

B. EXAMINATION PARTICIPANTS:

Albert Nixon
Senior Aviation Accident Investigator
National Transportation Safety Board
Federal Way, WA

Scott Boek
Aviation Safety Inspector
Federal Aviation Administration
Scottsdale, AZ

C. SUMMARY

Examination of the airplane wreckage was conducted on October 27, 2020, at the accident site about 4 miles east of Cordes, Arizona.

D. DETAILS OF THE INVESTIGATION

1.0 WRECKAGE AND IMPACT INFORMATION

Examination of the accident site revealed that the airplane impacted in remote hilly desert, rocky terrain with moderate brush and trees about 34° 17' 54" North and -112° 0' 58" West. The airplane impacted about halfway up the ridgeline, on a hillside slope of about 30°. The airplane came to rest inverted on about a 045° magnetic heading and at an elevation of about 3,720 ft. mean sea level. There was no ground disturbance prior to where the airplane came to rest. A barbed wire fence behind the airplane, and several trees and cactus surrounding the airplane were not damaged. All major components of the airplane were contained within the main wreckage site. No debris trail was present with the exception of the propeller, starter gear fragments, and a fuel line, located about 15 ft in front of the airplane and a small fragment of the airplane located about 10 ft behind the wreckage. There was no postimpact fire.



Figure 1: Airplane wreckage at accident site.

The left wing was attached. The left flap and aileron were attached at all their respective attachment points. The flap appeared to be near the neutral position. The left fuel tank was breached. The left tank fuel cap was found near the wreckage. The left main gear was retracted.

The right wing was attached, and the outboard 1/3 sustained impact damage and the outboard half had delaminated. The right flap and aileron were attached at all their respective attachment points. The flap appeared to be near the neutral position. The right fuel tank was breached. The fuel cap was observed secured. The right main gear appeared to be retracted.

The empennage was upright, relatively intact, and remained partially attached to the fuselage by the cables. The vertical stabilizer and rudder were attached to their respective attachment points. The left and right horizontal stabilizers were attached and relatively intact. On the hinge attachment points of the left horizontal stabilizer several screws were pulled through their housing on the elevator. Additionally, on the right horizontal stabilizer, at the outboard attachment point, the inboard screw was pulled through its housing on the elevator. The elevator trim was observed about neutral. Flight control continuity was unable to be established due to the impact damage, with the exception of the right aileron.

The instrument panel and cabin area were substantially damaged. The cabin area and fuselage were inverted. The 4-point seat belts had their lap belts cut by recovery personnel.

No oil was observed leaking at the wreckage site.

No bird remains or feathers were present in any of the windshield fragments, cabin area, or the main wreckage.

The engine remained attached however the carburetor had separated at its upper mounting flange and remained attached to the air intake box. The right front rocker cover was crushed. The two-bladed propeller was separated from the crankshaft. One blade was partially separated about 2 inches from the hub. Both blades exhibited chordwise scratching.

Two flash drives were recovered under the wreckage and will be sent to the IIC.

The site examination was completed, and the airplane wreckage was recovered for future examination.

Submitted by: Albert Nixon