

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



WPR24FA195

ACCIDENT SITE EXAMINATION SUMMARY

June 16, 2024

A. ACCIDENT

Location: South Lake Tahoe, California
Date: June 12, 2024
Time: 1300 PDT
Airplane: N37081, Luscombe 8A

B. ACCIDENT SITE EXAMINATION SUMMARY

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National Transportation Safety Board
Federal Way, Washington

Party Coordinator Paul Adams
Federal Aviation Administration
Reno, Nevada

C. DETAILS OF THE INVESTIGATION

1.0 Accident Site

The airplane was in the Humboldt-Toiyabe National Forest at 8,000 ft mean sea level (msl) on a magnetic heading of 330° in a small clearing surrounded by white fir and ponderosa pine.

The first identified point of contact was a 75-ft tall tree that was missing limbs and a portion of the tree trunk, which were located within the debris path. Also in the debris path, about 25 ft from the initial tree strike, was a portion of the empennage and tail section that was lodged in the top of an approximate 15- ft- tall tree. The main wreckage was located about 10 ft beyond the that tree. All major structural components of the airplane were located throughout the wreckage debris path.



Photo 1: Rear view of the accident airplane.



Photo 2: Forward view of the accident airplane.

2.0 Airframe Examination

The airframe came to rest inverted on a northerly heading. The propeller blade assembly remained attached to engine, and the engine remained attached to the airframe. The right wing remained separated from the airframe but remained connected via its flight control cables. The left wing remained attached to airframe. The tail section separated from the empennage at the rivet line.

The underside of the empennage is crushed with torsional twisting. The control cables for the right wing were pulled through tearing the fuselage.

The airframe is equipped with an internal fuel tank. The fuel tank was compromised, and fuel leaked out onto the ground; the ground was fuel soaked and smelled like 100-LL aviation fuel.

Two flight control cables that ran the length of the airplane from the cockpit to the tail section were moved; however, due to the damage to the cockpit, could not determine if they were to the rudder or horizontal stabilizer.

2.1 Wings

Left-wing

The left wing remained attached to the fuselage. The left-wing strut remained attached to the wing but was bent up near upward near the cockpit area and folded over the leading edge. The flap and aileron remained attached to the wing with relatively minor damage. The outboard portion of the wing sustained accordion type damage. Flap and aileron movement was observed when the yoke was manipulated.

Right-wing

The right came to rest upright on the right side of the airframe. However, the wing had detached at the wing root and was held on by the control cables. The leading edge had crush damage throughout the length of the wing. The inboard portion of the leading edge had been crushed in and downward with brown colored transfer like the color of tree bark. At the center of the leading edge was a more half-circular impression as well as tearing. About 3 ft of the wing strut separated and was about 40 ft west of the main wreckage. The underside of the strut also had brown colored transfer akin to the color of tree bark, the same brown colored tree bark was also found on the wing strut that remained attached to the fuselage. Movement of the aileron and flap was observed when the control cables were moved. The cables remained attached to the yoke.

2.2 Landing Gear

The accident airplane was a conventional landing geared equipped airplane. The main landing gear remained attached to the fuselage. The tail wheel remained attached to the tail section.

2.3 Cockpit

Power control cables were moved inside the cockpit with no movement restriction. The engine and propeller assembly were pushed into the cockpit area.

3.0 Engine Examination

The engine remained attached to the airframe. The cowlings were compressed around the engine, with the bottom cowl open exposing the bottom of the engine; the oil sump, intake and exhaust, and fuel pump were visible.



Photo 3: View of the engine.

4.0 Propeller Examination

The propeller assembly remained attached to the engine. One of the propeller blades was exposed and the other was underneath wreckage. The exposed propeller blade exhibited S-bending and chordwise scratching on the face side of the blade.

Submitted by:

Tealeye Cornejo
Air Safety Investigator (Field)