



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

October 5, 2022

DRAFT AIRFRAME EXAMINATION SUMMARY REPORT

WPR22LA317

This document contains 8 embedded photos.

A. ACCIDENT

Location: Boulder City, Nevada
Date: August 26, 2022
Aircraft: N916CA
NTSB IIC: Andrew Swick

B. EXAMINATION PARTICIPANTS:

Andrew Swick
Aviation Accident Investigator-IIC
National Transportation Safety Board
Phoenix, Arizona

C. SUMMARY

The examination revealed no evidence of preaccident mechanical malfunctions or anomalies that would have precluded normal operation. Flight data from the Dynon onboard instrument was downloaded.

D. AIRFRAME EXAMINATION

The wings were removed from the airplane to facilitate the relocation of the wreckage. The left wing had impact damage near the tip and the left wing had substantial damage to its lower side as a result of impacting a chain link fence. The fuselage and landing gear had substantial damage. The engine and propeller assembly remained attached to the fuselage. The engine cowling was crushed on the right side. The propeller spinner separated and the propeller blades were damaged.



Figure 1-Right forward side of airplane.



Figure 2-Left forward side of airplane.

The fuselage had buckling on both sides of the fuselage aft of the cabin area. The windshield was mostly separated. The right door was found in multiple sections. The right windshield pillar separated near the top wing attachment. Both metal fuel lines within the pillar were bent forward. The instrument panel right side panels were cracked.



Figure 3-Right side of aft fuselage.



Figure 4-Right side of airplane cabin area.

The nose gear was bent rearward and remained attached to the steering linkage. The left main gear remained attached to the airframe and was bent and twisted aft. The brake system was actuated and brake pressure was established and consistent at both main wheel brake assemblies.



Figure 5-Nose landing gear.



Figure 6-Left main gear.

Flight control continuity was established through both wings. The aileron bellcranks at both wing root areas were undamaged and aileron movement was normal. The aileron control linkage located in the airframe was undamaged and moved normally during control stick movement. Flap control linkage at the wing root areas were undamaged and moved normally. The elevator moved freely from each control stick. The rudder moved freely from the foot controls. Rudder and aileron manual trim worked normally. The electric elevator trim was activated and worked normally. The flap system was activated from the instrument panel and the control linkage moved normally in all positions.



Figure 7-View of the left aft side of the airframe.

The left wing lower surface including the aileron and flap were damaged. The lower plexiglass inspection panel revealed the undamaged aileron linkage assembly.



Figure 8-Left wing, view of the lower surface.

The fuel selector valve handle was found positioned in the “OFF” position. The handle was positioned in each position and the detents felt normal. The fuel boost pump was activated from the instrument panel and the pump sounded normal. The wing tank fuel caps were removed and the o-ring seals appeared to be undamaged. The interior of the fuel tanks, visible from the tank inlet were undamaged.

The engine, propeller and other fuel system components will be examined at a future date.

Submitted by: Andrew Swick