

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



WPR24LA154

WRECKAGE EXAMINATION REPORT

June 26, 2024

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A. ACCIDENT

Location: Lakeport, California
Date: May 16, 2024
Time: 0900 Pacific daylight time
Airplane: Cessna 172G, N4448L

B. WRECKAGE EXAMINATION REPORT

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C. SUMMARY

On May 16, 2024, about 0900 Pacific daylight time, a Cessna 172G, N4448L, was substantially damaged when it was involved in an accident in Lakeport, California. The pilot was not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

D. DETAILS OF THE EXAMINATION

1.0 Airframe Examination

The airplane remained intact with no damage to the wings. The tail section partially separated at the empennage.



Figure 1: Front View of Airplane

2.0 Engine Examination

Engine: O-300-D
Manufacturer: Continental
Serial Number: 29944-D-4-D

Pilot/owner was at TBO and was getting ready to replace the engine. Total time was 1,992 hours.

Visual examination of the engine revealed no obvious holes in the engine cowlings or the engine case, and the fuel system was not breached. Fuel system continuity was established from both wings to the carburetor. Continuity of the throttle and mixture control cables were established from the cockpit controls to the carburetor and all levers moved freely from stop to stop when actuated by hand.



Figure 2: Top View of Engine

Valve train and control continuity were established throughout the engine via manual rotation of the propeller blades. The top spark plugs were removed, and the ignition P-leads were positioned at the cylinder vanes and produced spark when the propeller was manually rotated. Compression was obtained at all cylinders in firing order.

The top and bottom spark plugs were removed and showed normal wear according to the Champion Aviation Check-A-Plug Chart AV-27. The Nos 2, 3, 5, 6 electrodes were rounder in shape than the Nos 1, 4. The No 5 bottom spark plug was carbon/oil fouled.



Figure 3: View of Spark Plugs

A ground run was performed at idle for 3 minutes, due to damage to the propeller blades a full run-up was not performed. A functional check of the magnetos and carburetor heat showed a normal rpm drop.

The rocker box covers were removed; the number 5 rocker box cover had some carbon build up flakes and the exhaust valve had some build up as well. The intake and exhaust valves exhibited the same amount of travel when the engine was manually rotated. All the cylinders were borescoped with normal operating signatures noted.

Fuel sample was taken from lower sump and was blue in color and had the smell of aviation fuel.

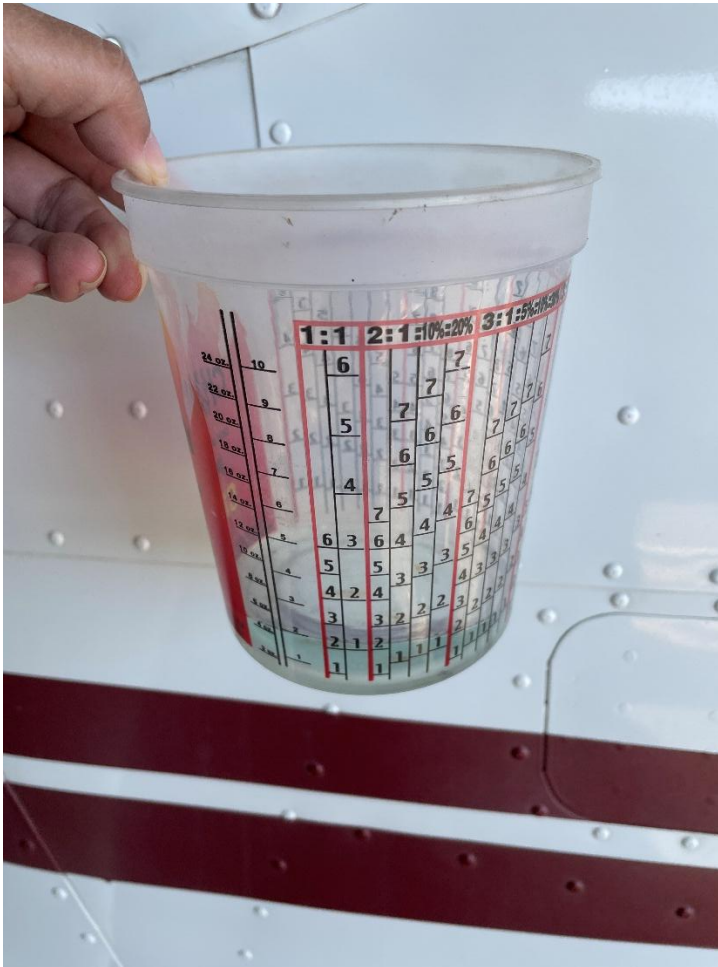


Figure 4: Fuel Sample

3.0 Propeller Examination

Propeller assembly remained attached to the engine. Both blades had torsional S-bending. One blade had some tip damage with gouges. The other blade had leading edge gouges and nicks with some damage to the tip.



Figure 5: View of Propeller Blade Note Tip Damage



Figure 6: View of Propeller Blade Note Damage

Submitted by:

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