

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN22LA308

N184CB - AIRFRAME AND ENGINE EXAMINATION REPORT

October 18, 2022

TABLE OF CONTENTS

A. ACCIDENT.....	3
B. N184CB - AIRFRAME AND ENGINE EXAMINATION REPORT.....	3
C. DETAILS OF THE EXAMINATION.....	3
1.0 ACCIDENT SITE	3
2.0 AIRFRAME EXAMINATION (VAN'S RV-6, SERIAL NUMBER 25454).....	4
3.0 ENGINE EXAMINATION (AERO SPORT POWER LTD O-360-A1A, SERIAL NUMBER 0341).....	4
4.0 PROPELLER EXAMINATION (HARTZELL HC-C2YK, SERIAL NUMBERS J62763 AND J62762).....	6
5.0 MAINTENANCE RECORDS REVIEW.....	6

A. ACCIDENT

Location: Watkins, Colorado
Date: July 3, 2022
Time: 0735 Mountain Time
Airplane: N184CB, Van's RV-6

B. N184CB - AIRFRAME AND ENGINE EXAMINATION REPORT

IIC	Michael J. Hodges National Transportation Safety Board Denver, Colorado
Party Coordinator	Jay Dankoff Federal Aviation Administration Denver, Colorado
Other	Charles Spaur N184CB Airplane Pilot/Owner/Builder Aurora, Colorado
Investigator	Ryan Tielhaber National Transportation Safety Board Denver, Colorado
Investigator	Kevin Otterstrom National Transportation Safety Board Denver, Colorado

C. DETAILS OF THE EXAMINATION

1.0 Accident Site

The airplane came to rest in an open, flat field in Watkins, Colorado. The pilot recovered the airplane back to his personal hangar at the Colorado Air and Space Port (CFO) in Watkins, Colorado.

The airplane was examined at CFO on August 2, 2022, at the pilot's personal hangar.

2.0 Airframe Examination (Van's RV-6, serial number 25454)

Flight control continuity was established. The pilot reported no issues with the flight control system during the accident flight.

The battery was turned off and the flaps were moved through their entire range of motion with no issues noted.

The left fuel tank was breached from the accident sequence. Per the pilot, fuel leaked at the accident site.

The right fuel tank was not breached. A fuel sample was removed from the right fuel tank and was checked for water with a water finding paste. No water or contamination was noted in the sample. The fuel sample was blue in color and the appearance was consistent with avgas.

The airplane sustained substantial damage to the structure behind the firewall and to the left and right side engine mounts.

There was no fire.

There were no mechanical issues or malfunctions or failures noted with the airframe.

3.0 Engine Examination (Aero Sport Power Ltd O-360-A1A, serial number 0341)

There was no fire.

The case and cylinders appeared intact.

The engine and accessories appeared to be intact.

The oil and fuel lines appeared to be intact.

Cockpit to engine control continuity was established (throttle, mixture, propeller, and carburetor heat).

6.25 quarts of oil was observed on the dipstick when it was removed.

Oil was observed on the number 3 cylinder and on the underside of the engine.

The spark plugs were removed and appeared to have normal-worn signatures per the Champion Aerospace Check-A-Plug Chart.

The propeller was able to be rotated by hand to confirm internal engine continuity with no issues. The magneto impulse coupler was heard during the rotation. Rocker arm movement was confirmed on all cylinders for the intake and exhaust.

All pistons moved within the cylinders and each of the accessory gears moved when the propeller was rotated by hand.

Thumb compression was verified for each cylinder.

The magneto harness and ignition leads were all intact.

The exhaust system was intact and there are no internal baffles per the pilot.

Both magnetos were removed and produced spark via a drill. Both magnetos produced spark at all leads with no issues.

The engine oil filter was removed, and it was cut open. No particles of concern were noted in the filter material.

The airbox was removed from the carburetor. During the removal, a piece of black plastic bag (foreign object debris - FOD) was found jammed in the throttle body of the carburetor. The airbox was damaged from the impact sequence and was full of dirt from the impact sequence. The filter was full of dirt from the impact sequence.

The FOD was removed from the throttle body and no issues were noted with the throttle body.

The FOD was consistent with a plastic bag type material.

The pilot reported he did not know where the FOD originated from.

The carburetor was removed. The bowl and floats were examined with no issues. Fuel was found in the bowl, and in the fuel line going to the carburetor.

There is no vacuum system in the engine.

There is no gascolator on this airplane.

The issue noted with the engine was the FOD found jammed in the throttle body, that would block air flow.

4.0 Propeller Examination (Hartzell HC-C2YK, serial numbers J62763 and J62762)

The propeller was able to be rotated by hand.

The fiberglass spinner sustained impact damage from the accident sequence.

The propeller consisted of a two-blade metal propeller.

One blade did not appear bent. The other blade was bent about midspan, rearward, about 90°.

There were no mechanical issues or malfunctions or failures noted with the propeller.

5.0 Maintenance Records Review

The maintenance records were reviewed.

Per the pilot, the last time the air filter and bowl were accessed and worked on was on April 2, 2021, by himself.

Submitted by:

Michael J. Hodges
Investigator-In-Charge