



CEN22LA414
WRECKAGE EXAMINATION SUMMARY

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Airframe Notes

The wreckage was examined after it was transported from the accident site. The airplane wings were removed from the fuselage to facilitate transportation. In addition, the vertical stabilizer, horizontal stabilizer, rudder, and elevator were also disassembled for transportation and available for examination.

An inspector from the Denver Flight Standards District Office was able to provide basic flight control continuity but was unable to fully test the elevator system. An examination of linkage and cabling of the elevator control was conducted. Working from the flight control surfaces forward to the flight controls, the cables and bellcranks were all examined and found to be unobstructed. The control column was impact jammed and folded into the cockpit area. Attempts to straighten the control column were unsuccessful, so further examination of linkages encompassed removing access panels and search for any foreign objects which could have obstructed full airplane control. No such objects were discovered. There was no evidence of a flight control malfunction with the airplane.

The tachometer hour meter read 2,928.6 hours.

Engine Examination

All sparkplugs were removed and photo documented. The rocker box covers were removed, and all rocker arms appeared undamaged. The hub connecting the crankshaft and propeller was partially fractured and the propeller could not be rotated by hand. The propeller was removed and the engine was rotated using a hand tool via the crankshaft hub. Valve train continuity and thumb compression was obtained throughout the engine. The left magneto produced a spark at all terminals when the engine was rotated confirming accessory gear continuity. The right magneto was removed and found to not have an identifiable impulse coupling. The magneto gear was rotated via a power drill and spark was obtained at each terminal.

Each cylinder was borescope examined and no anomalies were detected.

All engine controls remained attached to the carburetor.

Throttle control continuity was confirmed via the cockpit control.

Mixture and propeller controls were jammed by cockpit damage.

The fuel pump was removed and when actuated by hand provided suction and flow.

The carburetor was removed and disassembled.

- Liquid consistent with 100 low lead fuel was found in the carburetor bowl.
 - The fuel was placed in a clean glass jar and allowed to set. No contaminants or separation was observed.
- The plastic floats appeared undamaged.
- The fuel filter screen was clear of debris.

The firewall fuel strainer was opened, and the filter was clear of debris.

The electrical fuel pump was powered using an external battery and appeared to function normally. The fuel selector was examined and able to rotate to all positions. A detent was positively felt at each position.

- Using shop air, the fuel lines from the left and right fuel tank were confirmed to the firewall fuel strainer.

The airbox filter was soiled by oil, likely from damage to the propeller hub just above it. No obstructions were noted with the airbox.

No parts were retained, and the examination concluded.

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