

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN23LA163

EXAMINATION SUMMARY

May 10, 2023

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A. ACCIDENT

Location: Buffalo, Iowa
Date: April 22, 2023
Time: 0136 central daylight time
Aircraft: Cessna 150J, N60860

B. PARTICIPANTS

Party Representative Barton Van Heuveln
Aviation Safety Inspector / PAI
Federal Aviation Administration
Ankeny, Iowa

Party Representative Michael Newhall
Aviation Safety Inspector / PMI
Federal Aviation Administration
Ankeny, Iowa

Party Representative Daniel Michaelsen
Aviation Safety Inspector / PMI
Federal Aviation Administration
Ankeny, Iowa

C. ACCIDENT SUMMARY

On April 22, 2023, about 0136 central daylight time, a Cessna 150J airplane, N60860, was substantially damaged when it was involved in an accident near Buffalo, Iowa. The pilot was not injured, and the pilot-rated passenger sustained a minor injury. The airplane was operated as a Title 14 Code of Federal Regulations Part 91 personal flight.

An initial post-recovery airplane examination was completed on April 24, 2023. A detailed engine examination was conducted on May 10, 2023. Both examinations were conducted by FAA inspectors at Fred's Towing (Davenport, Iowa).

D. EXAMINATION SUMMARY

1.0 Airplane Examination

Cessna 150J (s/n 15071627)

The left main fuel tank appeared to contain minimal fuel along with a significant quantity of water consistent with the airplane being stored outside. The

right fuel tank appeared to be empty at the time of the examinations. Both fuel caps were securely installed at the time of the initial airplane examination. However, at the time of the engine examination, the left fuel cap was not installed.

2.0 Engine Examination

Continental O-200-A (s/n 199891-9-A)

The engine assembly, including the crankcase and cylinders, appeared intact and undamaged. The engine mount was deformed consistent with impact. Engine control continuity (throttle, mixture, carburetor heat) was confirmed. The oil sump was compromised and little or no oil was observed.¹ The oil filter was intact. The filter element was intact and contained no debris.

Internal engine and accessory section continuity were confirmed via crankshaft rotation. Compression and suction were obtained on all cylinders. Borescope examination of the cylinder bores, pistons, and valves was unremarkable. Each exhibited normal operating signatures.

The induction and exhaust ducting appeared intact and remained secured to each cylinder. The intake manifold was damaged at the carburetor mount consistent with the impact sequence. The carburetor was separated from the intake manifold. The venturi and butterfly valve appeared intact and unobstructed. The carburetor accelerator pump appeared operational. A minute amount of liquid was expelled when initially actuated.

The primer was seated and locked at the time of the exam. The primer lines appeared intact and secure. The fuel lines appeared intact and secure, with exception of the fuel line fitting at the gascolator which was separated consistent with impact. The gascolator bowl contained a blue-tinted fluid consistent in appearance with 100LL aviation fuel. The sample was clear and free of debris or sediment.

Both magnetos were securely attached to the engine and produced spark at all ignition leads on rotation. The ignition harness appeared undamaged. The spark plugs were intact and exhibited normal combustion signatures.

3.0 Propeller Examination

McCauley 1A101/DCM6848 (s/n G6829)

The propeller hub was secured to the engine propeller. Both propeller blades were located with the engine. One blade remained secured to the hub and were bent aft. One blade exhibited some gouges consistent with impact but appeared otherwise intact. The second blade appeared intact.

¹ The recovery operator (tow yard personnel) informed the inspectors that a significant amount of oil was present near the engine at the accident site.