



ERA22LA046

Margarettsville, North Carolina

November 4, 2021

Cessna 150M

NTSB ENGINE EXAMINATION REPORT

November 11, 2021

PARTICIPANTS IN THE EXAMINATION

**Heidi Kemner
Air Safety Investigator
National Transportation Safety Board
Ashburn, Virginia**

HISTORY OF FLIGHT

On November 4, 2021, at 1930 eastern daylight time, an Cessna 150M, N704HQ, was substantially damaged when it was involved in an accident in Margarettsville, North Carolina. The pilot was not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot reported that after descending to about 1,600 ft mean sea level, while on the localizer approach to runway 34 at the Emporia-Greenville Regional Airport (EMV), Emporia, Virginia, the engine began to “sputter.” He applied the carburetor heat, and the engine “got a little surge of power” and he pushed the carburetor heat back in. The engine sputtered again, and he re-applied the carburetor heat. He then raised the nose to gain altitude, and the engine stopped completely. He then turned around to head toward a road he had recently overflown, declared an emergency, and landed in the tree canopy.

ENGINE INFORMATION

Engine Manufacturer: Continental

Engine Model Number: O-200-A

Engine Serial Number: 255277

Recent Recorded Hobbs Time: 361.1 hours as of accident date.



Figure 1. Airplane at salvage yard.

INITIAL EXAMINATION

The engine remained mounted to the airplane and the following was noted:

- The engine remained attached to the airframe through all engine mounts.
- The crankcase remained intact.
- The cylinders remained attached to the crankcase.
- The throttle and mixture cables remained attached to the engine.
- The carburetor heat control cable remained attached to the engine.
- All components remained attached to the engine.

DETAILED EXAMINATION

Fuel was plumbed into to engine from an external fuel tank to the carburetor. The engine was primed, started, ran at idle without anomaly, and responded to throttle inputs.

Carburetor System

The carburetor heat control cable remained attached to the carburetor heat box and operated when the control in the cockpit was moved by hand. The contents of the carburetor was drained and was tested for water with water finding paste. There was no presence of water in the fuel and it was free of debris. The carburetor heat hose remained attached to the carburetor heat box and was removed to facilitate examination of the carburetor.



Figure 2. View of fuel from carburetor being tested for water.

Throttle and Mixture Controls

The throttle and mixture control cables remained attached to their respective attach points and moved when the controls in the cockpit were operated by hand.

Spark Plugs

The top spark plugs were removed from the engine and they were the massive electrode type. They were light grey in color and exhibited “normal wear” when compared to the Champion Check-A-Plug Chart.

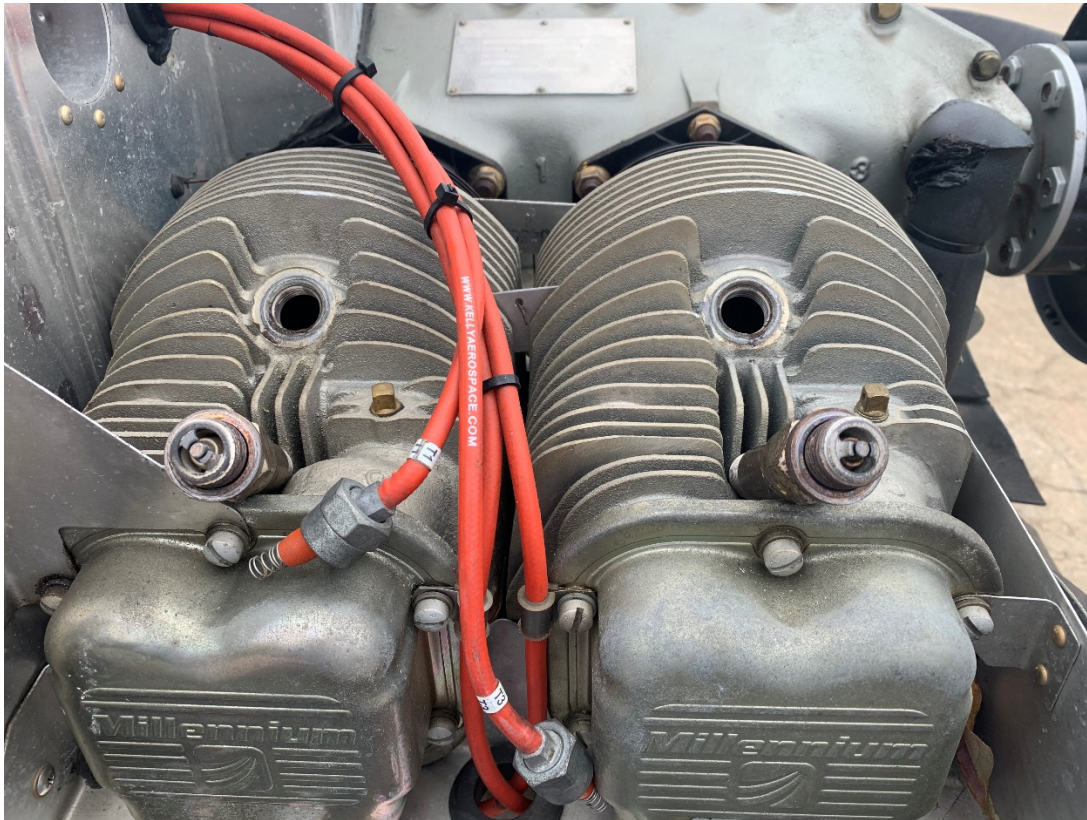


Figure 3. View of Nos. 1 and 3 top spark plugs.

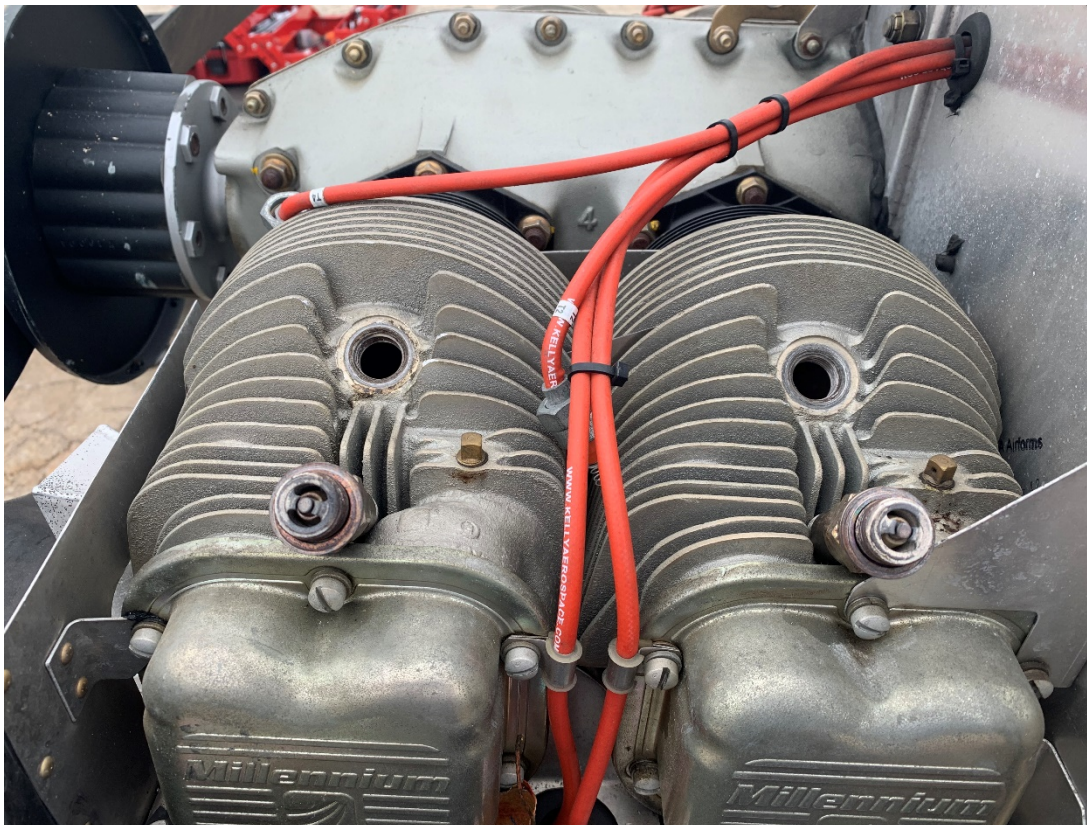


Figure 4. View of Nos. 2 and 4 top spark plugs.

Oil System

The oil filter remained attached to the engine. The date on the oil filter was May 3, 2021, with a tach time of 610.8 hours.

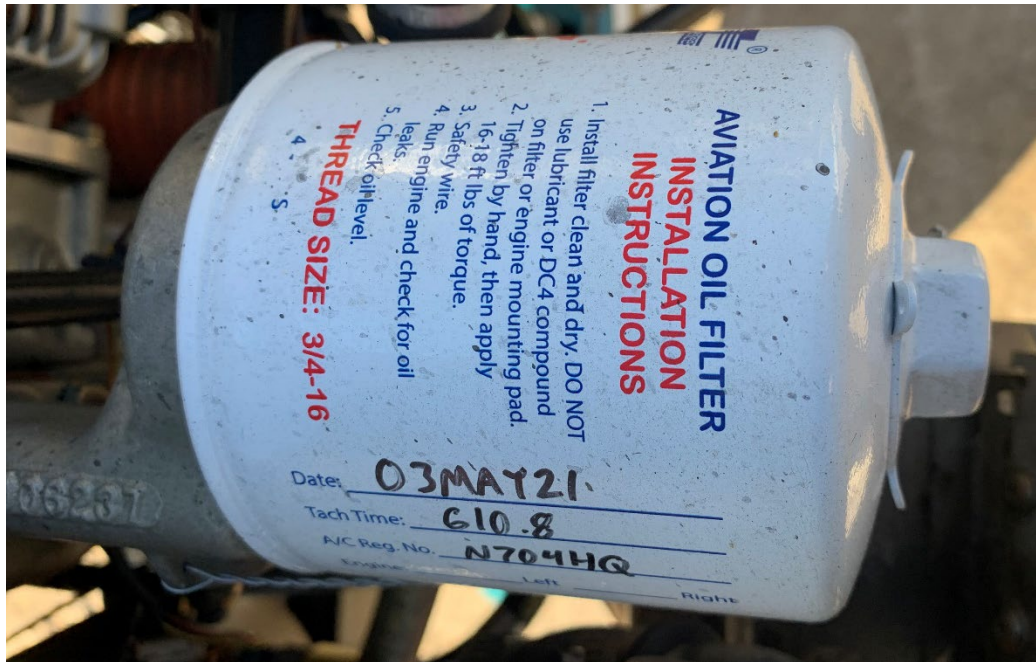


Figure 5. View of oil filter.

Fuel System

Fuel was drained out of the gascolator.

SUMMARY

There were no anomalies with the engine that would have precluded normal operation.

FUTURE ACTIVITIES

The wreckage will remain in storage at Atlanta Air Salvage, Griffin, Georgia, until it is released by the National Transportation Safety Board IIC.