



FAA

Aviation Safety

Memorandum

Date: July 8, 2019

To: Robert Gretz, SASI, NTSB, Eastern Region Aviation, [REDACTED]

From: Jim Ruckman, Aviation Safety Inspector, AFG-200-CE19, [REDACTED]

Subject: Engine Field Inspection Report Accident N388MA ERA18LA241

FAA Investigator Jim Ruckman

June 19, 2019

Facility AMF Aviation Springfield, TN M91 Airport

Lycoming IO360M1A TT 1346.6 SMOH 114 Approximately

The Lycoming engine including fuel, ignition, propeller and exhaust system components were removed from the airframe. The engine intake, exhaust systems components were damaged, precluding functional or operation testing. However, crankshaft and camshaft continuity was obtained from the propeller flange back to the accessory section and out to the rocker arms and valves. The inspection of this engine did not reveal any anomalies that would have prevented normal operation and production of rated horsepower.

- **Ignition System -**

Removed Left and Right Magnetos and checked for operation, both worked normal. The top 4 spark plugs showed a slight oil film and 2 of the bottom plugs showed signs of lead fouling.

- **Fuel system –**

The mechanical fuel pump was removed and operational checked. The screen was removed from the fuel servo and fuel manifold checked, all fuel items were normal.

- **Lubrication System –**

The engine contained 4 quarts of oil and the main filter was checked with no signs of metal.

- **Cylinders –**

Low compression on 3 cylinders, all cylinders were borescope with no visible damage. (Note the engine has not been operated for 9 months)

- **Propeller –**

The Hartzell propeller remained installed on the engine after the accident. There was damage to both prop blades that included minor bending and damage to the leading edges.