



Adam M. Gerhardt
Senior Aviation Accident Investigator
Office of Aviation Safety, Eastern Region

Date: 11/22/2022

Subject: ERA23LA063, Engine Examination and Maintenance Records

Contact: CHUCK THOMPSON (FAA), RALPH HICKS (NTSB)

The individuals noted above provided the following information via email memorandums. The below contents are a summary of what was reported:

Multiple FAA Inspectors examined and tested the aircraft engine at Atlanta Air Salvage, Griffin, Georgia. Photographs of excerpts of maintenance records were taken.

The engine started right up and ran perfectly. The engine ran at multiple RPM setting without issue. We inspected the entire aircraft and found everything operated normally, the electric driven fuel pump, fuel selector valve, fuel servo, wing venting system, fuel filter was clean.

Prior to removing the engine driven fuel pump, an FAA Inspector detached the fuel line on the engine side of the fuel filter placing the fuel line feeding the engine into a container full of fuel and turned the engine over several times. The pump did not suck any of the fuel out of the container.

The engine driven fuel pump was further evaluated by NTSB Investigator Ralph Hicks:

The pump had been disassembled and boxed separately from the wreckage.

- Internal continuity from the drive arm to the diaphragms was confirmed. The unit operated normally when the drive arm was actuated manually.
- The unit was dry and clean inside with no residue or contamination.
- All ports were clean and unobstructed.

- All rubber diaphragms were undamaged and supple. No punctures were noted.

PHOTOS AND FIGURES



Figure 1: View of the engine driven fuel pump disassembled postaccident.

**CENTRAL CYLINDER SERVICE INC.
AIRCRAFT ENGINE REBUILDERS**

[REDACTED]

1 ea. Lycoming IO-360-A1A EXP Engine S/N: L-19197-51A overhauled less accessories. This engine has been disassembled, inspected, overhauled less accessories, using listed parts per WO#20167 reassembled and tested in accordance with current recommended procedures and all clearances and tolerances are within new limits. Procedures and limit used are current and supplied by the manufacturer's overhaul manual. Overhauled customers' existing cylinders, Fuel Pump RSA-5AD1 and flow divider S/N: 2-1749 CCS overhauled. Clean and tested nozzles. Magnafluxed misc. steel parts under hidden damage report no cracks noted at this time. Crankcase dye checked and dimensionally inspected. Crankshaft dye checked and dimensionally inspected. Mains standard and Pins M003 A listing of airworthiness directives are attached to this work order for a period of two years. This engine has been test run and found in a condition for safe flight.

[REDACTED] *AAP IA* [REDACTED] 21/Oct 2021
 Authorized Signature Date
 Central Cylinder Service, INC.
 [REDACTED]

Figure 2: Photograph of the engine overhaul endorsement (October 21, 2021)

Oracle Aviation LLC
[REDACTED] KMLE
[REDACTED]



Tail #	Tach	Hobbs	AFTT	Eng TT	ESMOH	Prop TT	PSMOH	Date
N430JV	1224.9		1224.9	1189.0	0	318.6	0	11/17/2021

Using FAR 43 Appendix D as a guide to perform annual inspection.
 Removed engine for prop strike. See Central Cylinder Service **WO# 20167** for more details.
 Reinstalled engine with new engine mounts, **new sparkplugs**.
 Run up check No leaks.
 Complied with **AD15-19-07** by paragraph 1 section ii and passed see AD check list for compliance. Due again at tach time **1334.9**
 I certify that this aircraft engine has been inspected I/A/W annual inspection and found to be in an airworthy condition.
 Barry D. Daniels II
 [REDACTED]

Figure 3: Photograph of the annual inspection, denoting propeller strike (November 17, 2021)

Propeller A/C Description of all operations pertaining to Airworthiness Documents, Overhaul, Major or Minor Repairs
 Date TSN TSO Hrs
 Oracle Aviation LLC
 [REDACTED] KMLE
 [REDACTED]



Tail #	Tach	Hobbs	AFTT	Eng TT	ESMOH	Prop TT	PSMOH	Date
N430JV	1224.9		1224.9	1189.0	0	318.6	0	11/17/2021

Using FAR 43 Appendix D as a guide to perform annual inspection.
 Removed damaged Hartzell Model# **HC-C2YK-1BF/F7666A-2 S/N NS199B**. Installed Hartzell Model# **HC-C2YR-1BF S/N CH43767B**.
 Checked AD's through this date.
 Barry D. Daniels II
 [REDACTED]

Figure 4: Propeller maintenance entry denoting damaged propeller and repairs (November 17, 2021)

#END#