



NTSB MEMORANDUM FOR RECORD

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National Transportation Safety Board

Date: 2/9/2022, 3/1/2022
Person Contacted: JOHN SWASSEY (Mechanic, Dir. of Operations, Exec Air)
NTSB Accident Number: ERA22LA097

Narrative:

The individual noted above provided the following information via a telephone call and email memorandum. The below contents are a summary of what was reported:

The following discussion occurred on the telephone February 9, 2022, between this investigator and the individual noted above:

- He did not conduct an oil analysis anytime recently because the oil was recently changed and was frequently being changed.
- The No. 2 cylinder was doing a 'heavy blow by', which was the reason for the replacement.
- One of the studs on the No. 6 cylinder broke during an exhaust stack removal. So instead of trying to make a repair he replaced both No. 2 and No. 6 cylinder.
- There was no work that he was aware of, that was performed on the connecting rods dating back to the 2014 overhaul.
- There was no evidence of oil contamination on any recent oil change. The prop governor screen had no contaminants when it was last overhauled and re-installed shortly before the accident.

This NTSB investigator requested the following questions to be addressed via a written statement.

- 1. Why and how were the #2 and #6 cylinders replaced?**
- 2. Was there any sign of oil contamination when the propeller governor was replaced?**

The below paragraphs are Mr. Swasey's unedited responses:

- 1) The reason #2 cylinder was replaced during normal maintenance excessive ring blow by was noted coming from rings and valves. This required that the cylinder be removed for rework- upon removing exhaust stack #6 cylinder a exhaust stud broke upon



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removing a nut from one of the 4 studs so I replaced the entire cylinder rather than chanceing overdrilling the stud core remaining in the cylinder.

2) In respect to finding metal or other debris in the oil other than excessive carbon none was noted. this was also verified 6 hours operationally later upon removing the prop governor and inspecting the prop governor screen during normal maintenance overhaul cycle of the prop and governor. Carbon but no metal.

IAW Continental service manual # 2 reused piston pin and piston, removed carbine with red scotchbrite on piston pin, used wire wheel to remove carbon from piston, fitted new rings to overhauled cylinder, #6 installed new piston and wrist pin, on both cylinders lubricated with mineral oil and all parts, new gaskets and seals, placed piston in cylinder using ring compressor tool, then torque cylinder to engine, install push rod housings and push rods, installed rocker arms check dry lifter clearances, complete reinstalling ballfing, intake and exhaust. Install 12 Qt. of oil and cold break in the cylinders IAW service manual. All very straightforward and normal text book cylinder swap.

#END#