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Docket Management Facility
U.S. Department of Transportation
1200 New Jersey Avenue, SE
West Building Ground Floor, Room W12-140
Washington, DC 20590-0001

Re: FAA-2007-0051: Directorate Identifier 2007-NE-37-AD; Airworthiness Directives; Teledyne Continental Motors (TCM) IO-520, TSIO-520, and IO-550 Series Engines with Superior Air Parts, Inc. (SAP) Cylinder Assemblies Installed

The Aircraft Owners and Pilots Association (AOPA) is a not-for-profit individual membership organization of more than 415,000 pilots. Our mission is to effectively serve the interests of members as pilots or aircraft owners to establish, maintain, and articulate positions of leadership to promote the economy, safety, utility, and popularity of flight in general aviation aircraft. Representing two thirds of all pilots in the United States, AOPA is the largest civil aviation organization in the world.

AOPA submits the following comments to the Federal Aviation Administration's (FAA) Airworthiness Directives; Teledyne Continental Motors (TCM) IO-520, TSIO-520, and IO-550 Series Engines with Superior Air Parts, Inc. (SAP) Cylinder Assemblies Installed Airplanes Notice of Proposed Rulemaking (NPRM) published in the Federal Register on Friday, April 11, 2008.

AOPA is asking the FAA to reevaluate its current data and all new data submitted as part of the rulemaking and to consider extending the repetitive visual inspection and compression test interval from 50 hours to 100 hours time-since-last inspection or at annual, which ever occurs first.

AOPA is requesting that the FAA reevaluate inspection interval

The FAA is proposing an airworthiness directive for TCM IO-520, TSIO-520, and IO-550 engines with Superior Air Parts, Inc. investment cast cylinder assemblies requiring repetitive visual inspections and compression tests every 50 hours.

Explanation of proposed airworthiness directive: The proposed AD results from 24 reports of Superior cylinder assemblies with cracks or separation near the exhaust valves prompting the FAA to determine that the cylinder wall was significantly thinner in the areas where the cracks occurred. Cracking or separation typically occurred between 823

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and 1,985 hours time since new on engines that were predominantly operated at low altitudes and had a high ratio of takeoffs and landings per flight hour.

The proposed AD would require initial and repetitive inspection and compression tests to detect cracks in those investment cast cylinders with more than 750 flight hours time-inservice. Initial visual inspections and compression tests would need to occur within 25 flight hours after the effective date of this AD. Repetitive visual inspections and compression tests would need to be completed within 50-flight hours time-since-last inspection until the cylinders reach their time-before-overhaul limits at which time they must be retired.

AOPA recommendation: The impact of requiring visual inspections and compression tests at 50-hour intervals on aircraft owners is significant. AOPA is asking the FAA to reevaluate its current data and all new data submitted as part of the rulemaking and to consider extending the repetitive visual inspection and compression test interval from 50 hours to 100 hours time-since-last inspection, or at annual, whichever occurs first. Visual inspections and compression checks are already accomplished as part of 100-hour inspections on aircraft operated for hire and as part of annual inspections on all aircraft as per 14 CFR Part 91.49 and Part 43 Appendix D. Increasing the inspection interval would dramatically reduce the operational and financial impacts of this proposed AD.

Summary

AOPA believes that extending the inspection intervals from 50 hours to 100 hours timesince-last inspection or at next annual, which ever occurs first would reduce the impact of this proposed AD and are asking the FAA to consider all data to determine if this is appropriate.

Sincerely,

Robert Hackman Senior Director Regulatory Affairs