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February 23, 2015

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

RE: Docket No. FAA-2012-0002: Directorate Identifier 2011-NE-42-AD; Supplemental Proposed Airworthiness Directive; Continental Motors, Inc. Reciprocating Engines, Certain Airmotive, Engineering Corp. Replacement Parts Manufacturer Approval (PMA) Cylinder Assemblies Marketed by Engine Components International Division (ECi)

The Aircraft Owners and Pilots Association (AOPA), the world's largest aviation membership association, submits the following comments in response to the Federal Aviation Administration's (FAA) Supplemental Notice of Proposed Rulemaking (SNPRM) regarding certain Engine Components International (ECi) replacements parts manufacturer approval cylinder assemblies marketed by ECi published in the Federal Register on January 8, 2015.

AOPA continues to oppose this airworthiness directive and urges the FAA to take action which is more limited in scope and is in closer alignment with NTSB recommendations. AOPA appreciates the additional consideration and review performed by the FAA, however, the continued call for early retirement of ECi cylinders prior to their reaching time between overhaul (TBO) is unjustified by FAA documentation and National Transportation Safety Board (NTSB) review and recommendations.

Summary of Supplemental Proposed Rulemaking

On January 8, 2015, the FAA published, in the Federal Register, a supplemental proposed Airworthiness Directive (AD) against certain Airmotive Engineering Corporation (AEC) replacement cylinder assemblies marketed by ECi. These cylinders were used as aftermarket replacements on Continental Motors Incorporated models 520 and 550 reciprocating engines, and some model 470 engines when modified by supplemental type certificate (STC).

As proposed, this AD would require replacement of cracked cylinders, and cylinder assemblies at reduced times-in-service and prohibit the installation of affected cylinder assemblies into any engine. Under the SNPRM, cylinders with 680 or fewer hours TIS should be removed before reaching 1,000 hours TIS. Cylinders with more than 680 hours TIS but no more than 1,000 hours TIS should be removed within the next 320 operating hours or within 1,160 hours TIS, whichever occurs first. And cylinders with more than 1,000 operating hours should be removed within the next 160 operating hours or at the next engine overhaul, whichever comes first. The

new proposal also eliminates reporting requirements for all cylinders removed and adds removal of overhauled cylinders within 80 hours. Additionally, the FAA is proposing to remove the requirement for initial and repetitive inspections.

The previous version of the proposed rule would have divided the cylinders into two groups based on their serial number and given owners as little as 25 operating hours to remove them.

The FAA originally estimated that the inspections and cylinder removals—expected to affect approximately 30,000 cylinders and some 6,000 aircraft—would cost operators a combined $82.6 million. In the supplemental NPRM, the FAA has revised the estimate to 5,000 aircraft and total cost to $28,660,000

Proposed Action Continues to Exceeds NTSB Recommendation without Justification

The proposed rulemaking far exceeds the corrective actions recommended by the NTSB, which after conducting its own investigation, called for a more limited scope of affected cylinders and allowing cylinders to be operated to TBO prior to being replaced.

On February 24, 2012, the NTSB issued Safety Recommendation A-12-7 to the FAA. The NTSB recommended repetitive cylinder inspections and the removal of cylinders with limited serial numbers manufactured between May 2003 and October 2009 once the affected engine reached its recommended TBO.

On November 14, 2013 the NTSB took an unusual step of submitting its own formal comments to the docket, telling the FAA it supports a more conservative approach to handling problems affecting aftermarket ECi cylinders. In its comments, the Board asks the agency to take action "more consistent" with its recommendations released in February 2012, saying there was no available evidence to support the FAA's more drastic proposal.

The letter provides significant detail regarding the NTSB's findings utilized in developing Safety Recommendation A-12-7, the specific reasons for the limited affected serial numbers, and action called for to address the concerns. The Board's submittal goes on to question the actions in the FAA's proposed AD noting a lack of supporting documentation to warrant the expansion of the proposed action beyond that of Safety Recommendation A-12-7.

In concluding its letter, the Board states that they "are not aware of information to support the expanded scope and decrease in compliance time contained in the FAA's proposed AD, we support FAA action more consistent with NTSB Safety Recommendation A-12-7."

More recently, the NTSB submitted a second set of comments to the FAA, this time in response to the SNPRM. The NTSB, in these comments, reiterates earlier comments and again urges action in alignment with their original recommendations. The NTSB has recommended allowing the cylinders to go to TBO, rather than early retirement and replacement. AOPA agrees with the NTSB's conclusion that not enough information has been provided to justify the FAA's proposed AD.

Publish Internal Review Findings

The FAA states in the SNPRM that, "we determined that we needed to review how we proposed to address the unsafe condition. So, we formed a multi-directorate/multi-disciplinary team to review the technical basis for the proposed rule, as well as the numerous public comments, and the additional failure information provided by the commenters, to the NPRM. This team confirmed that the subject cylinder assemblies are unsafe."

AOPA shares the FAA's goals of ensuring aviation safety and maintaining a safe and efficient National Airspace System (NAS). In so doing, we must also ensure that actions taken to assure safety in the NAS are based upon sound data and logic in order to maximize safety and minimize negative operational and economic impacts. AOPA appreciates the FAA's extensive internal review of the proposed rule; however the FAA has provided no information specific to the review to the rulemaking docket. The docket includes no information, explanation, nor documentation supporting how the FAA came to the proposed compliance requirements of this SNPRM during the review. Without the relevant information and finding of the multi-directorate/multi-disciplinary team it is impossible for industry to provide meaningful comments to this SNPRM.

In the SNPRM, the FAA notes that their updated analysis indicates that the original requirements for cylinder assembly removal could be made less severe. It goes on to discuss the revised compliance times as proposed in the SNPRM which still requires removal and retirement of cylinder prior to TBO. Neither the SNPRM nor the regulatory docket provide an explanation as to how the FAA came to the decision regarding these new times which still fall short of TBO

The FAA must publish this important information to the rulemaking docket for public review and upon doing so, extend or reopen the comment period to allow for meaning comment.

Underestimates Financial and Potential Safety Impact

AOPA remains concerned that the FAA continues to fail to fully consider the economic impact of this proposed action. We appreciate the FAA's efforts in the SNPRM, to mitigate the financial impacts on aircraft owners by eliminating the reporting requirements and repetitive inspections. The FAA's cost analysis fails to consider the impact on owners of affected aircraft who will be facing the loss of use of their aircraft. This loss of use will result from the significant number of owners who will face the near- immediate requirement to replace their ECi cylinders overwhelm overhaul shops. Also of concern is the potential delay caused by the lack of available replacement cylinders. The proposed AD is silent regarding the current and future availability of replacement cylinders and the economic impact a shortage could have.

The proposal is also silent regarding the potential safety impact of forcing 5,000 (as revised in the SNPRM) aircraft to undergo maintenance and cylinder replacements. The lack of capacity at overhaul facilities combined with the need of these aircraft to be flown by their owners has the potential to result in owners being forced to utilized personnel and facilities inexperienced with

the nuances of cylinder replacements. The mass replacement of thousands of cylinders in the field could ultimately compromise, rather than enhance, pilot safety

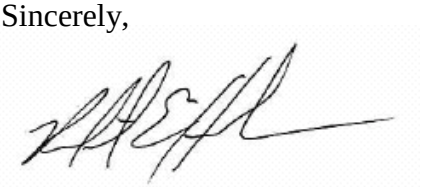
Conclusion

AOPA continues to oppose this airworthiness directive as proposed and urges the FAA to take action which is more limited in scope and is in closer alignment with NTSB recommendations. AOPA appreciates the additional consideration and review performed by the FAA. However, the continued call for early retirement of ECi cylinders prior to TBO is unjustified by FAA documentation and NTSB review and recommendations.

We appreciate the FAA's extensive internal review of the proposed rule; however the FAA has provided no information specific to the review to the rulemaking docket. The FAA must publish this important information to the rulemaking docket for public review and upon doing so, extend or reopen the comment period to allow for meaning comment.

AOPA remains concerned that the FAA continues to fail to fully consider the economic impact of this proposed action. We appreciate the FAA's efforts in the SNPRM, to mitigate the financial impacts on aircraft owners by eliminating the reporting requirements and repetitive inspections.

Sincerely,



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