



U.S. Department
of Transportation
**Federal Aviation
Administration**

Aircraft Certification Service
Compliance & Airworthiness Division

Fort Worth ACO Branch
10101 Hillwood Parkway
Fort Worth, TX 76177

NOV 20 2018

In reply refer to: 7F0-18-12545

Mr. David Oord
Aircraft Owners & Pilots Association
50 F Street NW, Suite 750
Washington, DC 20001

Dear Mr. Oord:

Global Alternative Method of Compliance (AMOC) to
Airworthiness Directive (AD) 2014-05-29, Docket Number FAA-2007-0051

The Federal Aviation Administration (FAA) has received your letter dated November 5, 2018, requesting FAA approval of a global AMOC to AD 2014-05-29. AD 2014-05-29 requires that IO 520 series engines with certain Superior Air Parts, Inc. (SAP) investment cast cylinder assemblies installed complete initial and repetitive inspections and compression tests to detect cracks in those cylinders.

You are proposing an AMOC to paragraph (i)(2) of AD 2014-05-29, which requires replacement of the cylinder assembly upon reaching 12 calendar years since installation. Subsequent to issuance of AD 2014-05-29, the FAA approved a global AMOC on May 19, 2014, to increase this compliance time to 17 years Time In Service (TIS). You propose extend the calendar limit by an additional five years, to 22 years TIS by following the same tests and inspections every 50 hours or annually, whichever comes first, that were identified in the previous AMOC. You contend that continued compression checks, visual inspections, leak checks, and borescope inspections will continue to adequately mitigate the unsafe condition identified in the AD. You also mention that there have been no incidents or accidents caused by cylinder head separation since issuance of the AD and approval of the subsequent AMOC.

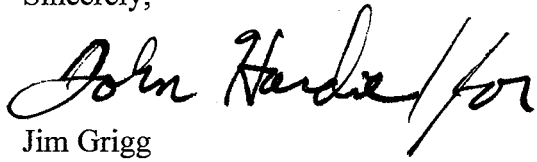
The Fort Worth ACO Branch partially approves your AMOC proposal to paragraph (i)(2) of AD 2014-05-29 to extend the compliance time of the AD, however, to 19 years TIS and not to the 22 years TIS as requested. This is due to a lack of substantiating data to extend the life of the cylinders beyond two years.

In accordance with FAA Order 8110.103B, the following conditions apply:

- This AMOC is transferable with the aircraft to another owner/operator.
- Before using this AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local Flight Standards District Office/Certificate Holding District Office.
- All provisions of AD 2015-01-02 that are not specifically referenced above remain fully applicable and must be complied with accordingly.

If you have any questions or need additional information, please contact Justin Carter by telephone at (817)222-5146 or by email at Justin.Carter@faa.gov.

Sincerely,

A handwritten signature in black ink that reads "John Hardie" followed by a stylized flourish or "for" that extends to the right.

Jim Grigg

Manager, Fort Worth ACO Branch

Compliance & Airworthiness Division

Aircraft Certification Service

cc: Kristi Bradley, AIR-7F2 COS Specialist