



## AIRCRAFT OWNERS AND PILOTS ASSOCIATION

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June 26, 2006

Docket Management Facility  
U.S. Department of Transportation  
400 Seventh Street, SW.  
Nassif Building, Room PL-401  
Washington, DC 20590-0001

**RE: Docket No. FAA-2006-24785; Directorate Identifier 2006-NE-20-AD; Notice of Proposed Rulemaking (NPRM); Lycoming Engines (L)O-360, (L)IO-360, AEIO-360, O-540, IO-540, AEIO-540, (L)TIO-540, IO-580, AEIO-580, and IO-720 Series Reciprocating Engines**

The Aircraft Owners and Pilots Association (AOPA), representing over 408,000 members, requests that the Federal Aviation Administration (FAA) remove from its proposed Airworthiness Directive (AD) the requirement for affected aircraft owners to replace engine crankshafts no later than 12 years since new or since the previous engine overhaul. The proposed AD's requirement that crankshafts be replaced at 12 years regardless of the hourly time in service is unwarranted and an unacceptable expense to owners given that as the FAA readily admits in the proposed AD, the unsafe condition is unrelated to calendar time and that crankshaft removal at overhaul is sufficient to reduce the risk of failure to an acceptable level.

***Proposed 12-year Crankshaft Replacement Time is Arbitrary and Unnecessary***

AOPA also notes that Lycoming's rationale for recommending overhaul at 12 years as specified in Service Instruction (SI) No. 1009AR has nothing to do with concerns over crankshaft metallurgical defects, but was meant to address the effects of environmental conditions over time. For the FAA to require aircraft owners to replace the crankshaft at 12 years is arbitrary, unnecessary, and will only result in a needless expense to those affected owners who may only have a few hours on their engine but will reach the 12-year calendar time well before overhaul is needed.

***Premature Crankshaft Replacement is an Unwarranted Expense to Owners***

In comments to the airworthiness concern sheet that preceded this NPRM, AOPA provided the FAA with survey data showing that about 89 percent of the affected owners would incur a significant economic impact if forced to retire their engine crankshaft prematurely. The FAA by mandating a 12-year calendar replacement time would in fact, force some aircraft owners to prematurely teardown a perfectly running engine and retire a serviceable crankshaft at a considerable and unwarranted expense.

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***Unsafe Condition is Unrelated to Calendar Time***

AOPA asks that the FAA not mandate compliance with the 12-year crankshaft replacement requirement specified in Lycoming SI No. 1009AR because the unsafe condition as noted by the FAA is unrelated to calendar time. Aircraft owners should be allowed to continue to operate their engine until reaching time for overhaul based on hours and not on an arbitrary calendar time.

Sincerely,

A handwritten signature in black ink, appearing to read "Luis Gutierrez", with a stylized flourish extending from the end.

Luis Gutierrez

Director

Regulatory and Certification Policy

cc: Fran Favara, Manager, FAA Engine and Propeller Directorate