This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39
RIN 2120–AA64

Airworthiness Directives; Lycoming Engines, Fuel Injected Reciprocating Engines

AGENCY: Federal Aviation Administration (FAA), DOT.
ACTION: Notice of proposed rulemaking (NPRM).
SUMMARY: We propose to supersede an existing airworthiness directive (AD) that applies to certain fuel injected reciprocating engines manufactured by Lycoming Engines. The existing AD currently requires inspection, replacement if necessary, and proper clamping of externally mounted fuel injector fuel lines. That AD also exempts engines that have a Maintenance and Overhaul Manual with an Airworthiness Limitations Section that requires inspection and replacement, if necessary, of externally mounted fuel injector lines. This proposed AD would require the same actions. Since we issued that AD, Lycoming Engines revised their Mandatory Service Bulletin (MSB) to add engine models requiring inspections. We are proposing this AD to prevent failure of the fuel injector fuel lines that would allow fuel to spray into the engine compartment, resulting in an engine fire.
DATES: We must receive comments on this proposed AD by April 1, 2011.
ADDRESSES: You may send comments by any of the following methods:
• Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
• Fax: 202–493–2251.
• Mail: U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Lycoming Engines, 652 Oliver Street, Williamsport, PA 17701, or go to http://www.lycoming. textron.com. You may review copies of the referenced service information at the FAA, Engine Certification Office, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call (781) 238–7125.

Examining the AD Docket
You may examine the AD docket on the Internet at http:// www.regulations.gov; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800–647–5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.
FOR FURTHER INFORMATION CONTACT:
Norm Perenson, Aerospace Engineer, FAA, Engine & Propeller Directorate, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516–228–7337; fax: 516–794–5531; e-mail: Norman.perenson@faa.gov.

SUPPLEMENTARY INFORMATION:
Comments Invited
We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include *Docket No. FAA–2007–0218; Directorate Identifier 92–ANE–56–AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments. We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion
On June 24, 2008, we issued AD 2008–14–07, Amendment 39–15602 (73 FR 39574), for certain fuel injected reciprocating engines manufactured by Lycoming Engines. That AD requires inspection, replacement if necessary, and proper clamping of externally mounted fuel injector fuel lines. Some of the clamps are difficult to install on the fuel injector lines and then to the engine, resulting in support clamps being omitted during field overhaul or repair. Lines not clamped correctly are subject to engine vibration and wear. That AD resulted from Lycoming Engines revising their MSB to add engine models requiring inspection, and from the need to clarify a repetitive inspection compliance time. We issued that AD to prevent failure of the fuel injector fuel lines that would allow fuel to spray into the engine compartment, resulting in an engine fire.

Actions Since Existing AD Was Issued
Since we issued AD 2008–14–07, Lycoming Engines revised their MSB to add engine models requiring inspection, replacement if necessary, and proper clamping of externally mounted fuel injector fuel lines. They also listed some of the physical damages that would reject a tube. Based on that MSB revision, we would require the inspection in this proposed AD supersede to meet all conditions specified in MSB No. 342F, dated June 4, 2010. In addition, we learned that two engines listed in AD 2008–14–07 do not exist. They are the IO–360–C2G6 and the TIO–540AE1A5, so we removed them from this proposed AD.

Relevant Service Information
We reviewed Lycoming Engines MSB No. 342F, dated June 4, 2010. The MSB describes procedures for inspecting, and if necessary replacing the fuel injector fuel lines. That MSB supersedes Textron Lycoming MSB No. 342E, 342D, MSB No. 342C, MSB No. 342B, Supplement No. 1 to MSB 342B, MSB 342A, and MSB 342.
FAA’s Determination
We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

Proposed AD Requirements
This proposed AD would retain all of the requirements of AD 2008–14–07. This proposed AD would add the LIO–360–M1A engine, as applicable.

Costs of Compliance
We estimate that this proposed AD affects 21,180 four-cylinder engines, 21,449 six-cylinder engines, and 256 eight-cylinder engines installed on aircraft of U.S. registry. We also estimate that it would take about 0.2 work-hour to inspect all lines on a four-cylinder engine, 0.5 work-hour to inspect all lines on a six-cylinder engine, and 0.7 work-hour to inspect all lines on an eight-cylinder engine. We also estimate that the average labor rate is $85 per work-hour. We do not anticipate any additional costs on U.S. operators, as the inspection would be done in conjunction with other work performed concurrently. We anticipate no parts to be required. Based on these figures, the total cost of the proposed AD to U.S. operators for one inspection of the fleet is $1,372,645.

Authority for This Rulemaking
Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings
We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:
(1) Is not a “significant regulatory action” under Executive Order 12866,
(2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
(3) Will not affect intrastate aviation in Alaska, and
(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]
2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2008–14–07, Amendment 39–15602 (73 FR 39574), and adding the following new AD:

Lycoming Engines (formerly Textron Lycoming Division, AVCO Corporation); Docket No. FAA–2007–0218; Directorate Identifier 92–ANE–56–AD.

Comments Due Date
(a) The FAA must receive comments on this AD action by April 1, 2011.

Affected ADs
(b) This AD supersedes AD 2008–14–07, Amendment 39–15602.

Applicability
(c) This AD applies to fuel injected reciprocating engines manufactured by Lycoming Engines that incorporate externally mounted fuel injection lines (engines with an “I” in the prefix of the engine model designation) as listed in the following Table 1:

<table>
<thead>
<tr>
<th>Engine Code</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEIO–320</td>
<td>–D1B, –D2B, –E1B, –E2B.</td>
</tr>
<tr>
<td>AIO–320</td>
<td>–A1B, –B1B, –C1B.</td>
</tr>
<tr>
<td>LIO–320</td>
<td>–B1A, –C1A.</td>
</tr>
<tr>
<td>AIO–360</td>
<td>–A1A, –A1B, –B1B.</td>
</tr>
<tr>
<td>HIO–360</td>
<td>–A1A, –A1B, –B1A, –C1A, –C1B, –D1A, –E1AD, –E1BD, –F1AD, –G1A.</td>
</tr>
<tr>
<td>IVO–360</td>
<td>–A1A.</td>
</tr>
<tr>
<td>LIO–360</td>
<td>–C1E6, –M1A.</td>
</tr>
<tr>
<td>TIO–360</td>
<td>–A1B, –C1A6D.</td>
</tr>
<tr>
<td>IGO–540</td>
<td>–B1A, –B1C.</td>
</tr>
</tbody>
</table>
TABLE 1—ENGINE MODELS AFFECTED—Continued

<table>
<thead>
<tr>
<th>Engine</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>IO–540</td>
<td>–A1A5, –AA1A5, –AA1B5, –AB1A5, –AC1A5, –AE1A5, –B1A5, –B1C5, –C1B5, –C4B5, –C4D5D, –D4A5, –E1A5, –E1B5, –G1A5, –G1B5, –G1C5, –G1D5, –G1E5, –G1F5, –J4A5, –V4A5D, –K1A5, –K1A5D, –K1B5, –K1C5, –K1D5, –K1E5, –K1E5D, –K1F5, –K1H5, –K1J5, –K1K5D, –K1M5, –K1M5D, –L1A5, –M1A5, –M1B5, –M1C5, –N1A5, –P1A5, –R1A5, –S1A5, –T4A5D, –T4B5, –T4B5D, –T4C5D, –V4A5, –V4A5D, –W1A5, –W1A5D, –W3A5D.</td>
</tr>
<tr>
<td>IV0–540</td>
<td>–A1A.</td>
</tr>
<tr>
<td>IO–720</td>
<td>–A1A5, –AA1A5, –AA1B5, –AB1A5, –AC1A5, –AE1A5, –B1A5, –B1C5, –C1B5, –C4B5, –C4D5D, –D4A5, –E1A5, –E1B5, –G1A5, –G1B5, –G1C5, –G1D5, –G1E5, –G1F5, –J4A5, –V4A5D, –K1A5, –K1A5D, –K1B5, –K1C5, –K1D5, –K1E5, –K1E5D, –K1F5, –K1H5, –K1J5, –K1K5D, –K1M5, –K1M5D, –L1A5, –M1A5, –M1B5, –M1C5, –N1A5, –P1A5, –R1A5, –S1A5, –T4A5D, –T4B5, –T4B5D, –T4C5D, –V4A5, –V4A5D, –W1A5, –W1A5D, –W3A5D.</td>
</tr>
</tbody>
</table>

Engine models in Table 1 of this AD are installed on, but not limited to, Piper PA–24 Comanche, PA–30 and PA–39 Twins; Comanche, PA–28 Arrow, and PA–23 Aztec; Beech 23 Musketeer; Mooney 20, and Cessna 177 Cardinal airplanes.

(d) This AD is not applicable to engines having internally mounted fuel injection lines, which are not accessible. Those engine models are not included in Table 1 of this AD.

(e) This AD is not applicable to engines that have a Maintenance and Overhaul Manual with an Airworthiness Limitations Section that requires inspection of externally mounted fuel injector lines. Those engine models are not included in Table 1 of this AD.

Unsafe Condition

(f) This AD was prompted by Lycoming Engines revising their Mandatory Service Bulletin (MSB) to add engine models requiring inspection. We are issuing this AD to prevent failure of the fuel injector fuel lines that would allow fuel to spray into the engine compartment, resulting in an engine fire.

Compliance

(g) Comply with this AD within the compliance times specified, unless already done.

Engines That Have Had Initial Inspections

(h) For engines that have had initial inspections in accordance with Textron Lycoming MSB No. 342, dated March 24, 1972; Textron Lycoming MSB No. 342A, dated May 26, 1992; Textron Lycoming MSB No. 342B, dated October 22, 1993; Supplement No. 1 to MSB No. 342B, dated April 27, 1999; Textron Lycoming MSB No. 342C, dated April 28, 2000; Textron Lycoming MSB No. 342D, dated July 10, 2001; Lycoming Engines MSB No. 342E, dated May 18, 2004, or Lycoming Engines MSB 342F, dated June 4, 2010, inspect as follows:

(1) For engines that have not yet had any fuel line maintenance done, or have not had any fuel line maintenance done since new or since the last overhaul, inspect in accordance with paragraph (k) of this AD within 50 hours time-in-service (TIS) after the effective date of this AD.

(2) For all other engines, inspect in accordance with paragraph (k) of this AD within 10 hours TIS after the effective date of this AD.

Repetitive Inspections

(i) Thereafter, inspect at intervals of 100 hours TIS (not to exceed 110 hours), at each engine overhaul, and after any maintenance has been done on the engine where any clamp (or clamps) on a fuel injector line (or lines) has been disconnected, moved, or loosened, in accordance with paragraph (k) of this AD.

Inspection Criteria

(k) Inspect the fuel injector fuel lines and clamps between the fuel manifold and the fuel injector nozzles, and replace as necessary any fuel injector fuel line and clamp that does not meet all conditions specified in Lycoming Engines MSB No. 342F, dated June 4, 2010.

Alternative Methods of Compliance (AMOCs)

(l) The Manager, New York Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD if requested using the procedures found in 14 CFR 39.19.

Related Information

(m) For more information about this AD, contact Norm Perenson, Aerospace Engineer, New York Aircraft Certification Office, FAA, Engine & Propeller Directorate, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; e-mail: phone: 516–228–7337; fax: 516–794–5531; Norman.perenson@faa.gov.