

# Proposed Rules

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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

[Docket No. 97-ANE-50-AD]

RIN 2120-AA64

#### Airworthiness Directives; Textron Lycoming Fuel Injected Reciprocating Engines

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The Federal Aviation Administration (FAA) proposes to supersede an existing airworthiness directive (AD), 98-18-12, applicable to certain Textron Lycoming reciprocating engines with certain Crane/Lear Romec "AN" rotary fuel pumps installed. That AD currently requires initial and follow-up torque check inspections of pump relief valve attaching screws. This proposal would require the same initial and follow-up torque check inspections of relief valve attaching screws, and add as a terminating action, replacement of the affected fuel pump at or before the overhaul interval, with a fuel pump having a new design valve housing. This proposal is prompted by the introduction of a new design pump relief valve housing and associated parts that provide enhanced resistance to fuel leakage, and the need for clarification of the requirements of the current AD. The actions specified by the proposed AD are intended to prevent rotary fuel pump leaks, which could result in an engine failure, engine fire, and damage to or loss of aircraft.

**DATES:** Comments must be received by February 11, 2003.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 97-ANE-50-AD, 12 New England Executive Park, Burlington, MA 01803-5299. Comments

may be inspected at this location, by appointment, between 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays. Comments may also be sent via the Internet using the following address: *9-ane-adcomment@faa.gov*. Comments sent via the Internet must contain the docket number in the subject line.

The service information referenced in the proposed rule may be obtained from Lycoming, 652 Oliver St., Williamsport, PA 17701; telephone; (717) 327-7080, fax; (717) 327-7100. This information may be examined, by appointment, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

**FOR FURTHER INFORMATION CONTACT:** Norm Perenson, Aerospace Engineer, New York Aircraft Certification Office, FAA, Engine and Propeller Directorate, 10 Fifth Street, 3rd floor, Valley Stream, NY 11581-1200; telephone (516) 256-7537; fax (516) 568-2716.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this action may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 97-ANE-50-AD." The

postcard will be date stamped and returned to the commenter.

#### Availability of NPRM's

Any person may obtain a copy of this NPRM by submitting a request to the FAA, New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 97-ANE-50-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

#### Discussion

On September 1, 1998, the FAA issued AD 98-18-12, Amendment 39-10728 (63 FR 48571, September 11, 1998), applicable to certain Textron Lycoming reciprocating engines with Crane/Lear Romec "AN" rotary fuel pump series RG9080, RG9570, and RG17980 installed. That AD requires initial and follow-up torque check inspections of pump relief valve attaching hardware screws, to prevent fuel leakage. That condition, if not corrected, could result in an engine failure, engine fire, and damage to or loss of aircraft.

Since AD 98-18-12 was issued, the manufacturer of the fuel pump has introduced a new design pump relief valve housing and associated parts, that provides enhanced resistance to fuel leakage on Crane/Lear Romec "AN" rotary fuel pumps, series RG9080, RG9570, and RG17980. The proposed AD would also address two concerns with the current AD:

- Initial and follow-up torque checks of affected pumps used as replacement pumps; and
- Compliance time for follow-up torque checks.

The current AD does not address installing affected pumps as replacement pumps. The proposed AD would allow installation of replacement pumps not modified with a newly designed valve, and require the same initial and follow-up torque checks to be performed to all replacement pumps until a pump with a "/M" after the part number is installed.

Additionally, the current AD does not specify an exact time by when follow-up torque checks must be performed. The current AD requires, and the proposal would require, that operators perform those follow-up torque checks after waiting a minimum time, either 50 hours TIS or 6 months, in order to allow the gasket to seat. Follow-up torque checks performed too soon after the

initial torque is set, would not reveal potential loosening that could lead to the fuel leaks. The FAA expected that operators would perform follow-up checks at the next opportunity after that minimum period had elapsed to ensure that the gasket had fully seated and that fuel leaks were no longer likely to develop. Therefore, this proposal would require follow-up torque checks at periodic intervals, and when no retorquing is required, visual inspections at periodic intervals.

**Manufacturer's Service Information**

The FAA has reviewed and approved the technical contents of Lycoming Service Bulletin (SB) No. 529B, dated June 10, 2002, that describes procedures for initial and follow-up torque check inspections of affected pump relief valve attaching screws.

**FAA's Determination of an Unsafe Condition and Proposed Actions**

Since an unsafe condition has been identified that is likely to exist or develop on other Textron Lycoming reciprocating engines with Crane/Lear/Romec "AN" rotary fuel pump series RG9080, RG9570, and RG17980 installed, the proposed AD would supersede AD 98-18-12, maintaining the same requirement for initial and follow-up torque check inspections of relief valve attaching screws, and add as a terminating action, replacement of the fuel pump with one having a newly designed valve housing. The actions must be done in accordance with the service bulletin described previously.

**Economic Analysis**

There are about 16,000 engines with Crane/Lear/Romec "AN" rotary fuel

pumps of the affected design in the worldwide fleet. The FAA estimates that 9,600 pumps installed on aircraft of U.S. registry would be affected by this proposed AD. The FAA also estimates that it would take approximately 3 work hours per pump to perform the proposed actions, and that the average labor rate is \$60 per work hour. Required parts would cost approximately \$300 per pump. Based on these figures, the total cost of the proposed AD on U.S. operators is estimated to be \$4,608,000.

**Regulatory Analysis**

This proposed rule does not have federalism implications, as defined in Executive Order 13132, because it 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. Accordingly, the FAA has not consulted with state authorities prior to publication of this proposed rule.

For the reasons discussed above, I certify that this 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); and (3) if promulgated, 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. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the

location provided under the caption **ADDRESSES**.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Safety.

**The Proposed Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

**PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

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

**§ 39.13 [Amended]**

2. Section 39.13 is amended by removing Amendment 39-10728 (63 FR 48571, September 11, 1998), and by adding a new airworthiness directive, to read as follows:

**Textron Lycoming:** Docket No. 97-ANE-50. Supersedes AD 98-18-12, Amendment 39-10728.

**Applicability**

This airworthiness directive (AD) is applicable to Textron Lycoming IO-320, LIO-320, IO-360, HIO-360, TIO-360, LTIO-360, GO-435, GO-480, IGO-480-A1B6, IO-540, IGO-540, AEIO-540, HIO-540, TIO-540, LTIO-540, TIGO-541, IO-720, and TIO-720 reciprocating engines, with Crane/Lear/Romec RG9080, RG9570, and RG17980 series "AN" rotary fuel pumps listed in Table 1 installed. Table 1 follows:

TABLE 1.—APPLICABLE PUMP CROSS REFERENCE LIST

Lear/Romec series	Textron Lycoming part number (P/N)
RG9080F2 .....	68262, 68262-85
RG9080J4A .....	LW-13909, LW-13909-85
RG9080J6A .....	LW-14444, LW-14444-85
RG9080J7A .....	LW-13920, LW-13920-85
RG9080J8A .....	LW-15740, LW-15740-85
RG9570K1 .....	62E22288
RG9570P/P1 .....	LW-19012
RG17980 .....	74547, 74547-85
RG17980A .....	76188, 76188-85
RG17980D .....	76486, 76486-85
RG17980E .....	77443, 77443-85
RG17980J .....	78993, 78993-85
RG17980K .....	LW-11166, LW-11166-85
RG17980P .....	LW-12534, LW-12534-85
RG17980U .....	62D21153, 62D21

These engines are installed on, but not limited to fuel injected, reciprocating engine-powered aircraft manufactured by Cessna, The New Piper, Inc., Mooney, Raytheon

(Beech), Bellanca, Champion, Partenavia, Rockwell, Schweizer, Enstrom, Aerospatiale (SOCATA), Maule, Aero Commander, Helio, Hiller, and Pacific Aerospace Corp.

**Note 1:** This AD applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area

subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

#### Compliance

Required as indicated, unless already done.

To prevent rotary fuel pump leaks, which could result in an engine failure, engine fire, and damage to or loss of the aircraft, accomplish the following:

(a) If the Lear/Romec part number (P/N) on rotary fuel pumps, series RG9080, RG9570, or RG17980 has an "/M" suffix, the pump has been modified, and no further action is required.

(b) If the P/N does not have an "/M" suffix, perform initial and follow-up torque check inspections of pump relief valve attaching screws in accordance with the Accomplishment Instructions of Lycoming Service Bulletin (SB) No. 529B, dated June 10, 2002, as follows:

(1) Within 10 hours time-in-service (TIS), or 30 days after the effective date of this AD, whichever occurs first, perform the initial torque check inspection. If the torque does not meet the specifications in Lycoming SB No. 529B, dated June 10, 2002, tighten screws to the required torque in accordance with that SB.

(2) Perform follow-up torque check inspections at 50 hour intervals TIS, or 6 months since the previous torque check inspection, whichever occurs first. If the torque does not meet the specification in Lycoming SB No. 529B, dated June 10, 2002, during this follow-up inspection, tighten screws to the required torque in accordance with that SB.

(3) Continue the follow-up torque check inspections required by paragraph (a)(2) of this AD until:

(i) The accumulation of 100 hours TIS since the inspection with the torque remaining within the SB specification; or  
(ii) The torque meets the SB specification during the initial inspection and a subsequent inspection taking place after accumulating an additional 50 hours TIS also meets the SB specification.

(4) After the accumulation of 100 hours TIS since the inspection with the torque remaining within the SB specification; visually inspect the pump at 50-hour intervals until the pump is replaced with a modified pump (with the "/M" after the part number).

(c) Replacement of a rotary fuel pump series RG9080, RG9570, or RG17980, with an unmodified pump (without the "/M" after the part number) requires repeating the initial and follow-up inspections in accordance with paragraph (b) of this AD.

#### Optional Terminating Action

(d) Replacement of a rotary fuel pump series RG9080, RG9570, or RG17980, with a

modified pump (with the "/M" after the part number) constitutes terminating action for the inspection requirements specified in paragraphs (b)(1) through (b)(4) of this AD.

#### Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York Aircraft Certification Office (ACO). Operators must submit their request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, New York ACO.

**Note 2:** Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the New York ACO.

#### Special Flight Permits

(f) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the inspection requirements of this AD can be done.

Issued in Burlington, Massachusetts, on December 5, 2002.

**Francis A. Favara,**

*Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.*

[FR Doc. 02-31396 Filed 12-12-02; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 2002-NM-73-AD]

RIN 2120-AA64

#### Airworthiness Directives; Aerospatiale Model ATR42-500 Series Airplanes, and Model ATR72-102, -202, -212, and -212A Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Aerospatiale Model ATR42-500 series airplanes, and Model ATR72-102, -202, -212, and -212A series airplanes. This proposal would require replacement of insulation blankets constructed of metallized polyethyleneterephthalate (MPET) located from sections 11 through 16 of the fuselage with new insulation blankets constructed of Terul 18™. This proposal is prompted by reports of in-flight and ground fires on certain airplanes manufactured with insulation

blankets constructed of MPET, which may contribute to the spread of a fire when ignition occurs from small ignition sources such as electrical arcing or sparking. The action specified by the proposed AD is intended to ensure that insulation blankets constructed of MPET are removed from the fuselage. Such insulation blankets could propagate a small fire that is the result of an otherwise harmless electrical arc and could lead to a much larger fire. This action is intended to address the identified unsafe condition.

**DATES:** Comments must be received by January 13, 2003.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2002-NM-73-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: [9-anm-nprmcomment@faa.gov](mailto:9-anm-nprmcomment@faa.gov). Comments sent via fax or the Internet must contain "Docket No. 2002-NM-73-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in the proposed rule may be obtained from Aerospatiale, 316 Route de Bayonne, 31060 Toulouse, Cedex 03, France. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

**FOR FURTHER INFORMATION CONTACT:** Dan Rodina, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2125; fax (425) 227-1149.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained