

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 97-ANE-37-AD]

RIN 2120-AA64

**Airworthiness Directives; Superior Air Parts, Inc., Piston Pins Installed on Teledyne Continental Motors Reciprocating Engines****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 Superior Air Parts, Inc., piston pins installed on Teledyne Continental Motors reciprocating engines. This proposal would require removal from service of defective piston pins, and replacement with serviceable parts. This proposal is prompted by reports of numerous piston pin fractures. The actions specified by the proposed AD are intended to prevent the piston pin from puncturing the engine crankcase by the connecting rod, resulting in the loss of oil leading to total power failure and possible fire, or freeing the connecting rod, possibly puncturing the cylinder or jamming the engine crankshaft, resulting in catastrophic engine failure.

**DATES:** Comments must be received by April 20, 1998.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 97-ANE-37-AD, 12 New England Executive Park, Burlington, MA 01803-5299. Comments may also be sent via the Internet using the following address: "9-ad-engineprop@faa.dot.gov". Comments sent via the Internet must contain the docket number in the subject line. Comments may be inspected at this location between 8:00 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Superior Air Parts, Inc. 14280 Gillis Rd., Dallas, TX 75244; telephone (800) 400-5949. This information may be examined at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA.

**FOR FURTHER INFORMATION CONTACT:** Paul Madej, Aerospace Engineer, Special

Certification Office, FAA, Rotorcraft Directorate, 2601 Meacham Blvd., Ft. Worth, TX 76137-4298; telephone (817) 222-4635, fax (817) 222-5785.

**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 notice 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 notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 97-ANE-37-AD." The postcard will be date stamped and returned to the commenter.

**Availability of NPRMs**

Any person may obtain a copy of this NPRM by submitting a request to the FAA, New England Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 97-ANE-37-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

**Discussion**

The Federal Aviation Administration (FAA) received numerous reports of fractured Parts Manufacturer Approval (PMA) Superior Air Parts, Inc. piston pins, Part Number (P/N) SA629690, installed on Teledyne Continental Motors IO-360, TSIO-360, and LTSIO-360 series reciprocating engines. The investigation reveals that some of these piston pins shipped from Superior Air Parts, Inc. between August 1, 1994, through June 20, 1996, may contain subsurface manufacturing imperfections, such as higher impurity levels and retained austenite as well as

imperfections caused by final machining, such as grind burns. Failure of the piston pin may cause puncturing of the engine crankcase by the connecting rod resulting in the loss of oil leading to total power failure and possible fire. Failure of the piston pin may free the connecting rod, possibly puncturing the cylinder or cause jamming of the engine crankshaft resulting in catastrophic engine failure.

The FAA has reviewed and approved the technical contents of Superior Air Parts, Inc. Mandatory Service Bulletin (SB) No. 96-001, dated August 5, 1996, that states that piston pins, P/N SA629690, should be removed from service, and replaced with serviceable parts.

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require, within 25 hours time in service after the effective date of this AD, removal from service of defective piston pins, and replacement with serviceable parts. The actions would be required to be accomplished in accordance with the SB described previously.

The FAA estimates that 2,322 engines installed on aircraft of U.S. registry would be affected by this proposed AD, that it would take approximately 6 work hours per engine to accomplish the proposed actions, and that the average labor rate is \$60 per work hour. Required parts would cost \$200 per engine. Based on these figures, the total cost impact of the proposed AD on U.S. operators is estimated to be \$1,300,320.

The regulations proposed herein would not have substantial direct effects 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. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

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 adding the following new airworthiness directive:

**Teledyne Continental Motors With PMA Superior Air Parts, Inc. Piston Pins, Part Number (P/N) SA629690:** Docket No. 97-ANE-37-AD.

**Applicability:** Superior Air Parts, Inc., Parts Manufacturer Approval (PMA) piston pins, Part Number (P/N) SA629690, shipped from Superior Air Parts, Inc., from August 1, 1994, through June 20, 1996, installed on Teledyne Continental Motors IO-360-A, -AB, -C, -CB, -D, -DB, -G, -GB, -H, -HB, -J, -JB, -K, -KB; LTSIO-360-E, -EB, -KB; TSIO-360-A, -AB, -C, -CB, -D, -DB, -E, -F, -FB, -GB, -H, -HB, -JB, -KB, -LB, -MB series reciprocating engines, and which were overhauled or had cylinder head maintenance performed by a repair facility other than Teledyne Continental Motors after August 1, 1994. These engines are installed on but not limited to the following aircraft: Cessna 172XP, 336, 337, T337, P337, and T-41B/C (military); Maule M-4-210, M-4-210C, M-4-210S, M-4-210T, and M-5-210C; Swift Museum Foundation, Inc. GC-1A, GC-1B, New Piper Inc. PA-28-201T, PA-28R-201T, PA-28RT-201T, PA-34-200T, and PA-34-220T; Reims FR172, F337, and FT337; Goodyear Airship Blimp 22; Mooney M20-K; and Pierre Robin HR100.

**Note 1:** Shipping records, engine logbooks, work orders, and parts invoices check may allow an owner or operator to determine if this AD applies.

**Note 2:** This airworthiness directive (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 (d) 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 accomplished previously.

To prevent the piston pin from puncturing engine crankcase by the connecting rod, resulting in the loss of oil leading to total power failure and possible fire, or freeing the connecting rod, possibly puncturing the cylinder or jamming the engine crankshaft, resulting in catastrophic engine failure, accomplish the following:

(a) If an engine has not had a piston pin installed after August 1, 1994, or if an engine has had a piston pin installed after August 1, 1994, but it was installed by Teledyne Continental Motors, then no action is required.

(b) For engines that had a piston pin installed after August 1, 1994, by an entity other than Teledyne Continental Motors, within 25 hours time in service (TIS) after the effective date of this AD, determine if a suspect PMA Superior Air Parts, Inc. piston pin, P/N SA629620, could have been installed in accordance with Superior Air Parts, Inc. Mandatory Service Bulletin (SB) No. 96-001, dated August 5, 1996. If unable to verify that a suspect piston pin was not installed using a records check, disassemble the engine in accordance with the applicable Maintenance Manual or Overhaul Manual, visually inspect or verify for suspect piston pins, and accomplish the following:

(1) If it is determined that suspect PMA Superior Air Parts, Inc. piston pins, P/N SA629620, could have been installed, remove from service defective piston pins and replace with serviceable piston pins.

(2) If it is determined that suspect PMA Superior Air Parts, Inc. piston pins, P/N SA629620, could not have been installed, no further action is required.

(c) For the purpose of this AD, a serviceable piston pin is any piston pin that has been verified not to be a PMA Superior Air Parts, Inc. piston pin, P/N SA629690, shipped from Superior Air Parts, Inc., from August 1, 1994, through June 20, 1996. Installation of a PMA Superior Air Parts Inc. piston pin, P/N SA629690, that can not be verified to be outside of the suspect shipping period range, is prohibited after the effective date of this AD.

(d) 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, Special Certification Office. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Special Certification Office.

**Note 3:** Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Special Certification Office.

(e) Special flight permits may be issued in accordance with sections 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 may be performed.

Issued in Burlington, Massachusetts, on February 6, 1998.

**James C. Jones,**

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

[FR Doc. 98-3796 Filed 2-13-98; 8:45 am]

BILLING CODE 4910-13-U

## DEPARTMENT OF TRANSPORTATION

### Coast Guard

### 33 CFR Part 100

[CGD07-98-004]

RIN 2115-AE46

### Special Local Regulations; Annual Air and Sea Show, Fort Lauderdale, FL

**AGENCY:** Coast Guard, DOT.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The Coast Guard proposes to establish permanent special local regulations for the City of Fort Lauderdale Annual Air & Sea Show. This event will be held annually on the first Friday, Saturday and Sunday of May, and will involve approximately 150 participating aircraft and vessels, and 3,000 spectator craft. The resulting congestion will create an extra or unusual hazard in the navigable waters. These regulations are necessary to provide for the safety of life on navigable waters during the event.

**DATES:** Comments must be received on or before March 19, 1998.

**ADDRESSES:** Comments may be mailed to U.S. Coast Guard Group Miami, 100 MacArthur Causeway Miami Beach, Florida 33139, or may be delivered to the Operations Department at the same address between 7 a.m. and 3:30 p.m., Monday through Friday, except federal holidays. The telephone number is (305) 535-4448. Comments will be a part of the public docket and will be available for copying and inspection at the same address.

**FOR FURTHER INFORMATION CONTACT:** LTJG J. Delgado Coast Guard Group Miami, Florida at (305) 535-4409.

**SUPPLEMENTARY INFORMATION:**

### Request for Comments

The Coast Guard encourages interested persons to participate in this rulemaking by submitting written views, data, or arguments. Persons submitting comments should include their names, addresses, identify this rulemaking (CGD07-98-004), and the specific section of this proposal to which their comments apply, and give reasons for each comment.