DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 97–ANE–58–AD]

RIN 2120–AA64

Airworthiness Directives; Pratt & Whitney R–1340 Series 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 Pratt & Whitney R–1340 series reciprocating engines. This proposal would require initial and repetitive visual and fluorescent penetrant inspections of cylinders, Part Number 399359, for head cracking. This proposal is prompted by reports of cylinder head cracking. The actions specified by the proposed AD are intended to prevent cylinder head cracking, which can result in engine power loss, forced landing, and damage to the aircraft.

DATES: Comments must be received by August 11, 1998.

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–58–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 Pratt & Whitney, Publications Department, Supervisor Technical Publications Distribution, M/S 132–30, 400 Main Street, East Hartford, CT 06108; telephone (860)565–7700, fax (860)565–4503. This information may be examined at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

FOR FURTHER INFORMATION CONTACT: Wego Wang, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803–5299; telephone (781) 238–7134, fax (781) 238–7199.

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–58–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 Regional Counsel, Attention: Rules Docket No. 97–ANE–58–AD, 12 New England Executive Park, Burlington, MA 01803–5299.

Discussion

The Federal Aviation Administration (FAA) has received reports of cylinder head cracking on Pratt & Whitney (PW) R–1340 series reciprocating engines. The investigation has revealed cracking on top of the engine cylinder head, usually from one spark plug hole to another. In one case the engine's #1 cylinder head split into two pieces. One repair station has indicated that at least one or two cracked cylinder heads will be found on each engine during an engine repair cycle. An A&P mechanic, specializing in the maintenance of radial engines, has stated that he has removed at least thirteen cylinders with cracked cylinder heads from PW R–1340 engines in the first eight months of 1997. The operator involved in the above-mentioned accident has experienced one similar in-flight cylinder failure every year since operating PW R–1340 engines, and has discovered several cylinders with cracked cylinder heads during daily pre-flight inspections in 1997. Since the majority of aircraft with this engine installation are agricultural and fly at very low altitudes, engine power loss even short of a complete engine failure can result in a forced landing. This condition, if not corrected, could result in cylinder head cracking, which can result in engine power loss, forced landing, and damage to the aircraft.

The FAA has reviewed and approved the technical contents of PW Service Bulletin (SB) No. 1787, September 7, 1983, that describes procedures for visual and fluorescent penetrant inspections (FPI) of cylinders, Part Number 399359, for head cracking.

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 initial and repetitive visual inspections of cylinders for head cracking at intervals based upon whether the engines are cowled and baffled, or unbaffled installations. Cracked cylinder heads must be replaced with serviceable parts if found cracked. In addition, this AD would require FPI of each cylinder at overhaul. The actions would be required to be accomplished in accordance with the SB described previously.

There are approximately 3,000 engines of the affected design in the worldwide fleet. The FAA estimates that 2,535 engines installed on aircraft of U.S. registry would be affected by this proposed AD, that it would take approximately 1 work hour per engine to accomplish the visual inspection, and 15 work hours to accomplish the FPI, and that the average labor rate is $60 per work hour. Required parts would cost approximately $2,000 per engine. In addition, the FAA estimates that 5% of the fleet will require replacement parts upon inspection. Based on these figures, the total cost impact of the proposed AD on U.S. operators is estimated to be $2,687,100.

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:

Pratt & Whitney: Docket No. 97–ANE–58–AD.

Applicability: Pratt & Whitney (PW) R–1340 series reciprocating engines, with cylinders, Part Number 399359, installed. These engines are installed on but not limited to the following aircraft Air Tractor AT301, Schweizer G164A, and DeHavilland DHC3 series aircraft.

Note 1: 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 (c) 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 cylinder head cracking, which can result in engine power loss, forced landing, and damage to the aircraft, accomplish the following:

(a) Perform initial and repetitive visual inspections of cylinders for head cracking, and replace cracked cylinders with serviceable parts, in accordance with PW Service Bulletin (SB) No. 1787, dated September 7, 1983, as follows:

(1) For cowled and baffled installations, as follows:

(i) Perform the initial visual inspection within 125 hours TIS after the effective date of this AD.

(ii) Thereafter, visually inspect at intervals not to exceed 250 hours TIS since last inspection.

(2) For all other installations, as follows:

(i) Perform the initial visual inspection within 50 hours time-in-service (TIS) after the effective date of this AD.

(ii) Thereafter, visually inspect at intervals not to exceed 100 hours TIS since last inspection.

(b) At the next cylinder overhaul after the effective date of this AD, and at each subsequent overhaul, perform a fluorescent penetrant inspection (FPI) of cylinders for head cracking, and replace cracked cylinders with serviceable parts, in accordance with PW SB No. 1787, dated September 7, 1983.

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

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Engine Certification Office.

Issued in Burlington, Massachusetts, on June 4, 1998.

Ronald L. Vavruska,

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

[FR Doc. 98–15621 Filed 6–11–98; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 98–NM–146–AD]

RIN 2120–AA64

Airworthiness Directives; Aerospatiale Model ATR42 and ATR72 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 and ATR72 series airplanes. This proposal would require one-time inspections to verify the correct shape of the stiffeners for the upper engine cowl and to detect wear of the aft upper fittings of the rear engine mounts, and corrective actions, if necessary. This proposal is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by the proposed AD are intended to prevent wear (scratches or grooving) of the aft upper fittings of the rear engine mount, and consequent reduced structural integrity of the engine mounts.

DATES: Comments must be received by July 13, 1998.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–114, Attention: Rules Docket No. 98–NM–146–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

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: Norman B. Martenson, Manager, International Branch, ANM–116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–2110; 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 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