[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-1130; Directorate Identifier 2015-NE-04-AD]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Pratt & Whitney (PW) PW4164-1D, PW4168-1D, PW4168A-1D and PW4170 engines, and certain PW4164, PW4168, and PW4168A turbofan engines. This proposed AD was prompted by fuel nozzle-to-fuel supply manifold interface fuel leaks. This proposed AD would require inspecting fuel nozzles for signs of leakage, replacing hardware as required, and torqueing to specified requirement. We are proposing this AD to prevent fuel leaks which could result in engine fire and damage to the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, 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 proposed AD, contact Pratt & Whitney, 400 Main St., East Hartford, CT 06108; phone: 860-565-8770; fax: 860-565-4503. You may view this service information at the FAA, 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 by searching for and locating Docket No. FAA-2014-1130; 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: Katheryn Malatek, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7747; fax: 781-238-7199; email: katheryn.malatek@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this NPRM. Send your comments to an address listed under the ADDRESSES section.

Include “Docket No. FAA-2014-1130; Directorate Identifier 2015-NE-04-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM 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 NPRM.

Discussion

We received reports of four fuel nozzle leaks in service and an additional six fuel nozzle leaks found during shop visits. The root cause is inadequate torque of the fuel nozzle-to-fuel supply manifold B-nuts for the temperatures that the fuel nozzles experience. This condition, if not corrected, could result in engine fire and damage to the airplane.

Related Service Information under 1 CFR Part 51

We reviewed PW Alert Service Bulletin (ASB) No. PW4G-100-A73-44, dated October 10, 2014. This service information contains information regarding fuel nozzle manifold inspection and fuel nozzle-to-fuel supply manifold B-nut torque requirements. This service information is reasonably available because the interested parties have access to it through their normal course of business or see ADDRESSES for other ways to access this service information.

FAA’s Determination

We are proposing this NPRM because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This NPRM would require inspecting the fuel nozzle-to-fuel supply manifold interface for evidence of leaks and replacing hardware in cases where fuel leaks are identified. This NPRM also requires torqueing certain B-nuts to the specified requirement.

Differences Between this Proposed AD and the Service Information

PW ASB No. PW4G-100-A73-44 uses calendar dates for compliance time. This NPRM uses cycles. Using cycles from the effective date of the AD supports the intent of the ASB and ensures adequate compliance time after the effective date of the AD.

Costs of Compliance

We estimate that this proposed AD would affect about 72 engines installed on airplanes of U.S. registry. The average labor rate is $85 per hour. We estimate that parts replacement will cost about $1,356 per engine. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be $391,392.

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 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 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),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, 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.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Pratt & Whitney: Docket No. FAA-2014-1130; Directorate Identifier 2015-NE-04-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Pratt & Whitney (PW) PW4164-1D, PW4168-1D, PW4168A-1D and PW4170 engines; and all PW4164, PW4168, and PW4168A turbofan engines that have incorporated either PW Service Bulletin (SB) No. PW4G-100-72-214, dated December 15, 2011 or PW SB No. PW4G-100-72-219, Revision 1, dated October 5, 2011.

(d) Unsafe Condition

This AD was prompted by fuel nozzle-to-fuel supply manifold interface fuel leaks. We are issuing this AD to prevent fuel leaks which could result in engine fire and damage to the airplane.

(e) Compliance

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

(1) Within 800 flight hours after the effective date of this AD, and within every 800 hours since last inspection thereafter, inspect all fuel nozzle-to-fuel supply manifold interfaces for evidence of fuel leaks, soot, and coke formation. Use the Accomplishment Instructions, Part A, of PW Alert Service Bulletin (ASB) No. PW4G-100-A73-44, dated October 10, 2014 to do the inspections.

(2) Replace hardware that fails an inspection. Use the Accomplishment Instructions, Part A, of PW ASB No. PW4G-100-A73-44, dated October 10, 2014 to do the replacement.

(f) Mandatory Terminating Action

(1) Inspect all fuel nozzle-to-fuel supply manifold interfaces for fuel leaks, soot, and coke formation, replace hardware that fails inspection, and re-torque all fuel nozzle-to-fuel supply manifold B-nuts as follows:

(i) For engines with fewer than 1,500 cycles on the effective date of this AD, before accumulating another 650 cycles, not to exceed 1,900 cycles.

(ii) For engines with 1,500 cycles or more, but fewer than 2,500 cycles on the effective date of this AD, before accumulating another 400 cycles, not to exceed 2,700 cycles.

(iii) For engines with 2,500 cycles or more on the effective date of this AD, before accumulating another 200 cycles.

(2) Use the Accomplishment Instructions, Parts B through E, of PW ASB No. PW4G-100-A73-44, dated October 10, 2014 to do the inspection, replacement, and retorqueing.

(g) Definition

For the purpose of this AD "cycles" is defined as cycles since new or cycles since the incorporation of PW SB No. PW4G-100-72-214, dated December 15, 2011 or SB No. PW4G-100-72-219, Revision 1, dated October 5, 2011.

(h) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(i) Related Information

(1) For more information about this AD, contact Katheryn Malatek, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New

England Executive Park, Burlington, MA 01803; phone: 781-238-7747; fax: 781-238-7199; email: katheryn.malatek@faa.gov.

(2) PW ASB No. PW4G-100-A73-44, dated October 10, 2014, which is not incorporated by reference, can be obtained from Pratt & Whitney using the contact information in paragraph (j)(3) of this proposed rule.

(3) For service information identified in this proposed rule, contact Pratt & Whitney, 400 Main St., East Hartford, CT 06108; phone: 860-565-8770; fax: 860-565-4503.

(4) You may view this service information at the FAA, 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.

Issued in Burlington, Massachusetts, on April 10, 2015.

Ann C. Mollica,
Acting Directorate Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2015-08995 Filed: 4/20/2015 08:45 am; Publication Date: 4/21/2015]