DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2018–0920; Product Identifier 2016–NE–09–AD]

RIN 2120–AA64

Airworthiness Directives; Pratt & Whitney Division Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2016–22–05, which applies to certain Pratt & Whitney Division (PW) PW4164, PW4164–1D, PW4168, PW4168–1D, PW4168A, PW4168A–1D, and PW4170 turbofan engines. AD 2016–22–05 requires initial and repetitive inspections of the affected fuel nozzles and their replacement with parts eligible for installation. Since we issued AD 2016–22–05, PW introduced newly forged fuel nozzles, fuel manifold brackets, and clamps. This proposed AD would require initial and repetitive inspections of the affected fuel nozzles and fuel nozzle supply manifold assemblies, replacement of the affected fuel nozzles with parts eligible for installation, and the installation of new brackets and clamps on the fuel supply manifold assemblies with parts eligible for installation. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by January 3, 2019.

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 NPRM, contact Pratt & Whitney Division, 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 Standards Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781–238–7759.

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–2018–0920; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800–647–5527) is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Scott Hopper, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781–238–7154; fax: 781–238–7199; email: *scott.hopper@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–2018–0920; Product Identifier 2016–NE–09–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 proposed AD.

Discussion

We issued AD 2016–22–05, Amendment 39–18694 (81 FR 75686, November 1, 2016), (''AD 2016–22–05''), for certain PW PW4164, PW4164–1D, PW4168, PW4168–1D, PW4168A, PW4168A–1D, and PW4170 turbofan engines. AD 2016–22–05 requires initial and repetitive inspections of the affected fuel nozzles and their replacement with parts eligible for installation. AD 2016–22–05 resulted from several instances of fuel leaks on PW engines installed with the Talon IIB combustion chamber configuration. We issued AD 2016–22–05 to prevent failure of the fuel nozzles, which could lead to engine fire and damage to the airplane.

Actions Since AD 2016–22–05 Was Issued

Since we issued AD 2016–22–05, multiple PW4000 turbofan engines experienced fuel leaks resulting in engine fires. A subsequent review of the potential causes identified cracks in the fuel manifold at the braze joint. As a result, PW published PW Alert Service Bulletin (ASB) PW4G–100–A73–47, dated March 10, 2017, and PW Service Bulletin (SB) PW4G–100–73–48, Revision No. 1, dated April 24, 2018, to introduce a forged fuel nozzle that removes the brazed inlet fitting and adds new brackets and clamps to the fuel supply manifolds to dampen combustion chamber vibrations.

Related Service Information Under 1 CFR Part 51

We reviewed PW ASB PW4G–100–A73–45, dated February 16, 2016; PW ASB PW4G–100–A73–47, dated March 10, 2017; and PW SB PW4G–100–73–48, Revision No. 1, dated April 24, 2018. PW ASB PW4G–100–A73–45 describes procedures for inspecting and replacing the fuel nozzles. PW ASB PW4G–100–A73–47 describes procedures for replacing the fuel nozzle and support assembly. PW SB PW4G–100–73–48 describes procedures for replacing the fuel nozzle manifold assemblies and installing new brackets and clamps on the manifolds. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the **ADDRESSES** section.

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 the same type design.

Proposed AD Requirements

This proposed AD would retain all requirements of AD 2016–22–05. This proposed AD would require initial and repetitive inspections and replacement of the affected fuel nozzles. This proposed AD would also require replacement of the affected fuel nozzle supply manifold assemblies and the installation of new brackets and clamps on the fuel supply manifold assemblies with parts eligible for installation.

Differences Between This Proposed AD and the Service Information

PW ASB PW4G–100–A73–47, dated March 10, 2017, requires the installation of the new fuel nozzles by April 1, 2019, which is approximately 24 months from the PW ASB issue date. This AD requires initial inspection and replacement of failed fuel nozzles before further flight and installation of new fuel nozzles within 24 months after the effective date of this AD.

Costs of Compliance

We estimate that this proposed AD affects 72 engines installed on airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect fuel nozzles	2.2 work-hours × $85 per hour = $187	$0	$187	$13,464
Open and close cowl doors (on-wing)	1 work-hour × $85 per hour = $85	0	85	6,120
Remove and replace (24) fuel nozzles	48 work-hours × $85 per hour = $4,080	423,471.12	427,551.12	30,783,680.64
Remove and re-install necessary hardware according to AMM.	23 work-hours × $85 per hour = $1,955	0	1,955	140,760
Replace Fuel Supply Manifold Tubes and install new clamps/brackets.	16 work-hours × $85 per hour = $1,360	77,158.97	78,518.97	5,653,365.84

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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

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.

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 removing Airworthiness Directive (AD) 2016–22–05, Amendment 39–18694 (81 FR 75686, November 1, 2016), and adding the following new AD:

Pratt & Whitney Division: Docket No. FAA–2018–0920; Product Identifier 2016–NE–09–AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by January 3, 2019.

(b) Affected ADs

This AD replaces AD 2016–22–05, Amendment 39–18694 (81 FR 75686, November 1, 2016).

(c) Applicability

This AD applies to Pratt & Whitney Division (PW):

(1) PW4164, PW4168, and PW4168A model engines that have fuel nozzles, part number (P/N) 51J345, installed, and that have any of the following installed: Talon IIB combustion chamber per PW Service Bulletin (SB) PW4G–100–72–214, dated December 15, 2011; ring case configuration (RRC) high-pressure compressor (HPC) per PW SB PW4G–100–72–219, Revision No. 1, dated October 5, 2011, or original issue; or the outer combustion chamber assembly waspaloy nuts per PW SB PW4G–100–72–253, dated November 24, 2014;

(2) PW4168A model engines with Talon IIA outer combustion chamber assembly, P/N 51J100 or 51J382, and fuel nozzles, P/N 51J345, with serial numbers CGGUA19703 through CGGUA19718, inclusive, or CGGUA22996 and higher, installed;

(3) PW4168A–1D and PW4170 model engines with engine serial numbers P735001 through P735190, inclusive, and fuel nozzles, P/N 51J345, installed; and

(4) PW4164–1D, PW4168–1D, PW4168A–1D, and PW4170 model engines that have installed the RRC HPC per PW SB PW4G–100–72–220, Revision No. 4, dated September 30, 2011, or earlier revision, and have fuel nozzles, P/N 51J345, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7310, Engine Fuel Distribution.

(e) Unsafe Condition

This AD was prompted by several instances of fuel leaks on PW engines with the Talon IIB combustion chamber configuration installed. We are issuing this AD to prevent failure of the fuel nozzles. The unsafe condition, if not addressed, could result in engine fire and damage to the airplane.

(f) Compliance

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

(g) Required Actions

(1) Within 800 flight hours (FHs) after December 6, 2016, the effective date of AD 2016–22–05, or before further flight, whichever occurs later, and after that within every 800 FHs accumulated on the fuel nozzles, perform the following:

(i) Inspect all fuel nozzles, P/N 51J345, in accordance with Part A, of PW Alert Service Bulletin (ASB) PW4G–100–A73–45, dated February 16, 2016.

(ii) For any fuel nozzle that fails the inspection, before further flight, remove and replace with a part that is eligible for installation.

(2) At next shop visit or within 24 months after the effective date of this AD, whichever occurs first, perform the following:

(i) Remove all fuel nozzles, P/N 51J345, in accordance with Part A, of PW ASB PW4G–100–A73–47, dated March 10, 2017, and replace with parts eligible for installation.

(ii) Replace the fuel nozzle manifold supply assemblies and install the new brackets and clamps on the fuel supply manifolds in accordance with Accomplishment Instructions, ''For Engines Installed on Aircraft'' or ''For Engines Not Installed on Aircraft,'' of PW SB PW4G–100–73–48, Revision No. 1, dated April 24, 2018.

(h) Definitions

(1) For the purpose of this AD, an ''engine shop visit'' is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine case flanges, except for the following situations, which do not constitute an engine shop visit:

(i) Separation of engine flanges solely for the purposes of transportation of the engine without subsequent maintenance.

(ii) Separation of engine flanges solely for the purpose of replacing the fan or propulsor without subsequent engine maintenance.

(2) For the purpose of this AD, a part that is ''eligible for installation'' is a fuel nozzle with a P/N other than 51J345 that is FAA-approved for installation, and that meets the requirements of Part A, paragraph 5.B., or Part B, paragraph 2, of PW ASB PW4G–100–A73–47, dated March 10, 2017.

(i) Terminating Action

Installation of the eligible fuel nozzles, replacement of manifold supply assemblies, and installation of brackets and clamps in accordance with (g)(2) of this AD constitutes terminating action for the repetitive inspection requirements of paragraph (g)(1) of this AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k)(1) of this AD. You may email your request to: *ANE-AD-AMOC@faa.gov.*

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

(1) For more information about this AD, contact Scott Hopper, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781–238–7154; fax: 781–238–7199; email: *scott.hopper@faa.gov.*

(2) For service information identified in this AD, contact Pratt & Whitney Division, 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 Standards Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781–238–7759.

Issued in Burlington, Massachusetts, on November 9, 2018.

Karen M. Grant,

Acting Manager, Engine and Propeller Standards Branch, Aircraft Certification Service.

[FR Doc. 2018–24965 Filed 11–16–18; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2018–0961; Product Identifier 2018–NM–121–AD]

RIN 2120–AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 737–100, –200, –200C, –300, –400, and –500 series airplanes. This proposed AD was prompted by reports indicating that the pitot heat switch is not always set to ON, which could result in misleading air data. This proposed AD would require replacement of pitot anti-icing system components, installation of a junction box and wiring provisions, repetitive testing of the anti-icing system, and applicable on-condition actions. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by January 3, 2019.

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 NPRM, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110–SK57, Seal Beach, CA 90740–5600; telephone 562–797–1717; internet *https://www.myboeingfleet.com.* You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206–231–3195. It is also available on the internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2018–0961.

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–2018–0961; 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 NPRM, 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: Frank Carreras, Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206–231–3539; email: *frank.carreras@faa.gov.*

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–