Figure 4 to paragraph (g)(4) – *AFM Revision: Heat P/S Right Auxiliary*

PITOT-STATIC PROBE HEAT (CONTINUED) (Required by AD 2021--**)**

HEAT P/S R AUX

The HEAT P/S R AUX message indicates that right auxiliary pitot static probe heat is failed. This procedure objective is to determine whether more than one probe heat is failed, and to select air data sources to minimize or to prevent erroneous flight instrument indications.

Disengage the autopilot.

If EICAS message HEAT P/S R AUX is displayed and HEAT P/S F/O is blank, place the captain's air data source selector to R and the first officer's air data source selector to C. Engage the R autopilot, if needed, end of procedure.

[Disengage the autopilot.]

If EICAS messages HEAT P/S R AUX and HEAT P/S F/O are both displayed, engage the L or C autopilot, if needed. R autopilot is unreliable in icing conditions. Avoid icing conditions. Flight in icing conditions can result in unreliable first officer's flight instrument indications.

Note Inoperative Items:

- Both pitot probe heaters on the right side of the airplane are inoperative – Avoid Icing Conditions.
- Autothrottle inoperative, Reference EPR is blank - Use manual throttle.
- LNAV and VNAV inoperative – Use HDG SEL or HDG HOLD and FLCH, V/S or ALT HOLD.

Do not accomplish the HEAT P/S F/O non-normal procedure, end of procedure.

BILLING CODE 4910–13–C

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO 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 responsible Flight Standards 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 (i)(2) of this AD. Information may be emailed to: *9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.*

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(i) Related Information

(1) For more information about this AD, contact Huey Ton, Aerospace Engineer, Systems and Equipment Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712–4137; phone: 562–627–5320; email: *huey.ton@faa.gov.*

(2) For information about AMOCs, 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.*

Issued on November 12, 2021.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021–27974 Filed 12–27–21; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2021–0959; Project Identifier AD–2021–00830–E]

RIN 2120–AA64

Airworthiness Directives; Pratt & Whitney Division Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2019–03–01 and AD 2021–05–51, which apply to certain Pratt & Whitney Division (PW) PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090–3 model turbofan engines. AD 2019–03–01 requires performing initial and repetitive thermal acoustic image (TAI) inspections for cracks in certain 1st-stage low-pressure compressor (LPC) blades and removal of those blades that fail inspection. AD 2021–05–51 requires performing a one-time TAI inspection for cracks in certain 1st-stage LPC blades and removal of those blades that fail inspection. Since the FAA issued AD 2019–03–01 and AD 2021–05–51, the manufacturer determined the need to add initial and repetitive ultrasonic testing (UT) inspections of the 1st-stage LPC blades. This proposed AD would require initial and repetitive UT inspections and TAI inspections for cracks in certain 1st-stage LPC blades and removal of those blades that fail inspection. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by January 27, 2022.

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 *https://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 Street, East Hartford, CT 06118; phone: (860) 565–0140; email: *help24@prattwhitney.com;* website: *https://connect.prattwhitney.com.* You may view this service information at the FAA, Airworthiness Products Section, Operational Safety 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 at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2021–0959; 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, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Carol Nguyen, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238–7655; fax: (781) 238–7199; email: *carol.nguyen@faa.gov*.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under **ADDRESSES**. Include ''Docket No. FAA–2021–0959; Project Identifier AD–2021–00830–E'' at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend the proposal because of those comments.

The FAA has been informed that PW has done some outreach with affected operators regarding the proposed corrective actions for this unsafe condition. As a result, affected operators are already aware of the proposed corrective actions and, in some cases, have already begun implementation of the updated inspections on the 1st-stage LPC blades proposed by this AD. Therefore, the FAA has determined that a 30-day comment period is appropriate.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to *https://www.regulations.gov,* including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as ''PROPIN.'' The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Carol Nguyen, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA issued AD 2019–03–01, Amendment 39–19553 (84 FR 4320, February 15, 2019) (AD 2019–03–01), and AD 2021–05–51, Amendment 39–21470 (86 FR 13445, March 9, 2021) (AD 2021–05–51) for certain PW PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090–3 model turbofan engines. AD 2019–03–01 and AD 2021–05–51 were prompted by three in-flight failures of a 1st-stage LPC blade, with one failure resulting in an engine fire during flight. AD 2019–03–01 and AD 2021–05–51 require performing a TAI inspection for cracks in certain 1st-stage LPC blades and removal of those blades that fail inspection. The agency issued AD 2019–03–01 and AD 2021–05–51 to prevent failure of the 1st-stage LPC blades.

Actions Since AD 2019–03–01 and AD 2021–05–51 Was Issued

Since the FAA issued AD 2019–03–01 and AD 2021–05–51, the manufacturer developed an improved UT inspection for the three critical locations on the 1st-stage LPC blade, two at the mid span region of the blade and one at the flow path region of the blade. The manufacturer published Pratt & Whitney Alert Service Bulletin (ASB) PW4G–112–A72–361, dated October 15, 2021, which provides instructions for performing both the improved UT inspection and the TAI inspection. The manufacturer also determined that it was necessary to adjust the initial TAI inspection threshold and lower the repetitive TAI inspection interval on the 1st-stage LPC blades to address the unsafe condition.

FAA's Determination

The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Pratt & Whitney ASB PW4G–112–A72–361, dated October 15, 2021. This ASB specifies procedures for performing the TAI and UT inspections of 1st-stage LPC blades. 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 **ADDRESSES**.

Other Related Service Information

The FAA reviewed ''Engine-Driven Pump (EDP) Shutoff Valve Check'' (Subtasks 26–21–00–200–018, 26–21–00–200–019, and 26–21–00–840–022) of Boeing 777–200/300 Aircraft Maintenance Manual, dated September 5, 2021. The service information specifies procedures for performing the engine-driven pump shutoff valve functional check.

Proposed AD Requirements in This NPRM

This proposed AD would retain none of the requirements of AD 2019–03–01 and AD 2021–05–51. This proposed AD would require initial and repetitive UT inspections and TAI inspections for cracks in certain 1st-stage LPC blades and removal of those blades that fail inspection.

Interim Action

The FAA considers this AD to be an interim action. The FAA anticipates that further AD action will follow.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 108 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Perform UT flow path inspection of 1st-stage LPC blades.	15 work-hours × $85 per hour = $1,275	$0	$1,275	$137,700
Perform UT mid span inspection of 1st-stage LPC blades.	30 work-hours × $85 per hour = $2,550	0	2,550	275,400
Perform TAI inspection of 1st-stage LPC blades.	22 work-hours × $85 per hour = $1,870	0	1,870	201,960

The FAA estimates the following costs to do any necessary replacement that would be required based on the results of the proposed inspection. The agency has no way of determining the number of aircraft that might need this replacement:

ON-CONDITION COSTS

Action	Labor cost	Parts cost	Cost per product
Replace 1st-stage LPC blade	0 work-hours × $85 per hour = $0	$125,000	$125,000

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.

The FAA is 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

The FAA 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) Would not affect intrastate aviation in Alaska, and

(3) Would 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:

■ a. Removing Airworthiness Directive (AD) 2019–03–01, Amendment 39–19553 (84 FR 4320, February 15, 2019), and AD 2021–05–51, Amendment 39–21470 (86 FR 13445, March 9, 2021); and

■ b. Adding the following new airworthiness directive:

Pratt & Whitney Division: Docket No. FAA–2021–0959; Project Identifier AD–2021–00830–E.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) action by January 27, 2022.

(b) Affected ADs

This AD replaces AD 2019–03–01, Amendment 39–19553 (84 FR 4320, February 15, 2019), and AD 2021–05–51, Amendment 39–21470 (86 FR 13445, March 9, 2021).

(c) Applicability

This AD applies to Pratt & Whitney Division (PW) PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090–3 model turbofan engines, with a 1st-stage low-pressure compressor (LPC) blade, with part number 52A241, 55A801, 55A801–001, 55A901, 55A901–001, 56A201, 56A201–001, or 56A221, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7230, Turbine Engine Compressor Section.

(e) Unsafe Condition

This AD was prompted by three in-flight failures of a 1st-stage LPC blade, with one failure resulting in an engine fire during flight, and subsequent manufacturer publication of service information specifying improved inspections for three critical locations on the 1st-stage LPC blade. The FAA is issuing this AD to prevent failure of the 1st-stage LPC blades. The unsafe condition, if not addressed, could result in 1st-stage LPC blade release, damage to the engine, and damage to the airplane.

(f) Compliance

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

(g) Required Actions

(1) Initial 1st-Stage LPC Blade Inspections

(i) For 1st-stage LPC blades that have accumulated any number of cycles since new (CSN) greater than zero, before further flight after the effective date of this AD, perform a flow path and a mid span ultrasonic testing (UT) inspection of the 1st-stage LPC blades in accordance with the Accomplishment Instructions, Part A—Initial Inspection of All LPC Fan Blades Prior to Their Return to Service, paragraph 1.A. through C., of Pratt & Whitney Alert Service Bulletin (ASB) PW4G–112–A72–361, dated October 15, 2021 (PW4G–112–A72–361).

Note 1 to paragraph (g)(1)(i): New fan blades that have zero CSN do not need to undergo the initial 1st-stage LPC blade flow path and mid span UT inspection required by paragraph (g)(1)(i) of this AD, but must undergo the repetitive inspections of paragraph (g)(2) of this AD.

(ii) Within the following compliance times after the effective date of this AD, perform a thermal acoustic image (TAI) inspection of the 1st-stage LPC blades for cracks using a method approved by the FAA:

(A) For 1st-stage LPC blades with 1,000 CSN or more, with no prior TAI inspection, inspect before further flight.

(B) For 1st-stage LPC blades with 1,000 flight cycles (FCs) or more since the last TAI inspection, inspect before further flight.

(C) For 1st-stage LPC blades with fewer than 1,000 CSN, with no prior TAI inspection, inspect before accumulating 1,000 CSN.

(D) For 1st-stage LPC blades with fewer than 1,000 FCs since the last TAI inspection, inspect before accumulating 1,000 FCs since the last TAI inspection.

Note 2 to paragraph (g)(1)(ii): Vendors that can perform an FAA-approved TAI inspection are listed in the Vendor Services section of PW4G–112–A72–361.

(2) Repetitive 1st-Stage LPC Blade Inspections

(i) Before exceeding 275 FCs since the last flow path UT inspection, and thereafter at intervals not exceeding 275 FCs since the last flow path UT inspection, perform a flow path UT inspection of the 1st-stage LPC blades in accordance with the Accomplishment Instructions, Part B—Repetitive Inspection of All LPC Fan Blades After Their Return to Service, paragraph 1.A., of PW4G–112–A72–361.

(ii) Before exceeding 550 FCs since the last mid span UT inspection, and thereafter at intervals not exceeding 550 FCs since the last mid span UT inspection, perform a mid span UT inspection of the 1st-stage LPC blades in accordance with the Accomplishment Instructions, Part B—Repetitive Inspection of All LPC Fan Blades After Their Return to Service, paragraphs 1.B. and C., of PW4G–112–A72–361.

(iii) Before exceeding 1,000 FCs since the last TAI inspection, and thereafter at intervals not exceeding 1,000 FCs since the last TAI inspection, perform repetitive TAI inspections of the 1st-stage LPC blades using a method approved by the FAA.

(3) Removal of the 1st-Stage LPC Blade

(i) If any 1st-stage LPC blade fails any inspection required by paragraphs (g)(1) or (2) of this AD, before further flight, remove the 1st-stage LPC blade from service and replace with a part eligible for installation.

(ii) [Reserved]

(h) Special Flight Permit

Special flight permits, as described in 14 CFR 21.197 and 21.199, are not permitted except for airplanes on which the actions specified in paragraphs (h)(1) and (2) of this AD have been done.

(1) A flow path UT inspection of the 1st-stage LPC blades for cracking has been done as specified in the Accomplishment Instructions, Part A—Initial Inspection of All LPC Fan Blades Prior to their Return to Service, paragraph 1.A., of PW4G–112–A72–361, and the 1st-stage LPC blades have been found serviceable.

(2) A functional check of the left and right hydraulic pump shutoff valves to ensure they close in response to the fire handle input and all applicable corrective actions (*i.e.,* repair) within 10 days prior to flight.

Note 3 to paragraph (h)(2): Guidance for accomplishing the actions required by paragraph (h)(2) of this AD can be found in the ''Engine-Driven Pump (EDP) Shutoff Valve Check'' (Subtasks 26–21–00–200–018, 26–21–00–200–019, and 26–21–00–840–022) of Boeing 777–200/300 Aircraft Maintenance Manual.

(i) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraphs (g)(1) and (h)(1) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraphs (i)(1), (2), or (3) of this AD.

(1) Paragraph 2. of the Accomplishment Instructions of Pratt & Whitney Special Instruction No. 85F21, dated May 12, 2021, for a flow path UT inspection.

(2) Paragraph 1.a) through c) of the Accomplishment Instructions of Pratt & Whitney Special Instruction No. 130F–21, dated July 1, 2021, for a flow path and a mid span UT inspection.

(3) Paragraph 2.a) through c) of the Accomplishment Instructions of Pratt & Whitney Special Instruction No. 130F–21, Revision A, dated July 28, 2021, for a flow path and a mid span UT inspection.

(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 Carol Nguyen, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238–7655; fax: (781) 238–7199; email: *carol.nguyen@faa.gov.*

(2) For service information identified in this AD, contact Pratt & Whitney Division, 400 Main Street, East Hartford, CT 06118; phone: (860) 565–0140; email: *help24@prattwhitney.com;* website: *https://connect.prattwhitney.com.* You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (781) 238–7759.

Issued on December 14, 2021.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021–27840 Filed 12–22–21; 11:15 am]

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