



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2026-2724; Project Identifier AD-2025-01606-E; Amendment 39-23451; AD 2026-17-08]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney Division Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Pratt & Whitney Division (PW) Model PW4074D, PW4077D, PW4084D, PW4090, and PW4090-3 engines. This AD was prompted by the discovery of a quality escape involving incorrect shot peening on certain high-pressure compressor (HPC) drum rotor disk assemblies. This AD requires visually inspecting the HPC drum rotor disk assembly for incorrect shot peen coverage and, depending on the results of the inspection, replacing the HPC drum rotor disk assembly with a part eligible for installation. This AD also requires removing and replacing certain HPC drum rotor disk assemblies before reaching certain life limits. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2026-2724; 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 final rule, any comments received, and other information. The address for Docket Operations is U.S.

Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For PW material identified in this AD, contact PW, 400 Main Street, East Hartford, CT 06118; phone: (800) 565-0140; email: help24@prattwhitney.com; website: connect.prattwhitney.com.
- You may view this material 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 (817) 222-5110. It is also available at regulations.gov under Docket No. FAA-2026-2724.

FOR FURTHER INFORMATION CONTACT: Molly Sturgis, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (562) 627-5373; email: molly.a.sturgis@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain PW Model PW4074D, PW4077D, PW4084D, PW4090, and PW4090-3 engines. The NPRM was published in the *Federal Register* on March 24, 2026 (91 FR 13984). The NPRM was prompted by a notification from the manufacturer of a repair shop quality escape, which revealed that certain HPC drum rotor disk assemblies were shot peened in an area where peening was prohibited. Further investigation by the manufacturer revealed that incorrect shot peening of the HPC drum rotor disk assembly reduces the life of the part, and PW identified a select number of fielded HPC drum rotor disk assemblies that could have experienced the same quality escape and may have been peened in a prohibited area. As a result, PW revised the airworthiness limitations section of the existing aircraft maintenance manual to reflect the reduced life limit for the affected part and published updated service material with instructions for removal of affected HPC drum rotor disk assemblies prior to reaching the updated reduced life limits, and inspections of affected HPC drum rotor disk assemblies for incorrect shot peening. In the NPRM, the FAA proposed to require visually inspecting

the HPC drum rotor disk assembly for incorrect shot peen coverage before accumulating between 8,600 and 10,400 total life cycles since new, as applicable to HPC drum rotor disk assembly, and, depending on the results of the inspection, replacing the HPC drum rotor disk assembly with a part eligible for installation. The FAA also proposed to require removing and replacing certain HPC drum rotor disk assemblies before reaching certain life limits. The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from three commenters. The commenters were the Air Line Pilots Association, International (ALPA), All Nippon Airways (ANA), and The Boeing Company (Boeing). ALPA and Boeing supported the NPRM without change. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Clarify Acceptable Inspection Results and a Part Eligible for Installation

ANA requested that the FAA revise the NPRM to clarify what action should be taken if evidence of shot peening is not discovered during the visual inspection of the HPC drum rotor disk assembly, and to clarify that affected HPC drum rotor disk assemblies that have passed the visual inspection required by the NPRM are still eligible for installation. Specifically, ANA requested that the FAA add the following language to paragraphs (g) and (h)(2) of the proposed AD: "HPC drum rotor disk assemblies that have passed the inspection specified in paragraph (h)(1) of this AD with "SB A72-373" marking can be treated as a part eligible for installation."

The FAA partially agrees. The FAA disagrees with the specific language proposed by the commenter but agrees to update the definitions in paragraph (g) of this AD to clarify that HPC drum rotor disk assemblies that pass the visual inspection required by paragraph (h)(1) of this AD are considered eligible for installation.

Request To Allow Future Revisions of Service Material

ANA requested that the FAA revise the material citations specified in the NPRM to read "or later" following the revision date. ANA stated that future revisions of the material are possible.

The FAA disagrees with the request. Referring to documents that do not exist at the time the AD is published violates Office of the Federal Register (OFR) regulations, 1 CFR Part 51, regarding approval of materials “incorporated by reference” in rules. These OFR regulations require that either the service document be submitted to the OFR for approval as “referenced” material, in which case it may be simply called out in the text of an AD, or the service document contents be published as part of the actual AD language. Per 1 CFR 51.1(f), an AD may reference only the specific service document that was submitted to and approved by the OFR for “incorporation by reference.” In order for operators to use later revisions of the referenced document (issued after the publication of the AD), either the FAA must revise the AD to reference the specific later revisions, or operators must request the approval of their use as an alternative method of compliance (under the provisions of paragraph (i) of this AD). The FAA did not change this AD as a result of this comment.

Request to Refer to Service Material

ANA requested that the FAA revise paragraphs (h)(3) and (4) of the proposed AD by incorporating the following language: “...remove the HPC drum rotor disk assembly from service in accordance with the Accomplishment Instructions, paragraph 1.A., of PW Service Bulletin PW4G-112-A72-370, Original Issue or later, and replace with a part eligible for installation.” ANA noted that as the NPRM is currently written, it is unclear that these paragraphs are requirements of PW Service Bulletin PW4G-112-A72-370.

The FAA infers that ANA is requesting for PW Service Bulletin PW4G-112-A72-370 to be incorporated by reference. The FAA disagrees with the request to incorporate PW Service Bulletin PW4G-112-A72-370 by reference. Paragraphs (h)(3) and (4) of this AD identify the part numbers and serial numbers for the affected HPC drum rotor disk assemblies that need to be replaced, as well as the compliance times for replacement. The FAA did not incorporate PW Service Bulletin PW4G-112-A72-370 by reference because the AD allows any FAA-approved method for replacing the HPC drum rotor disk assembly and incorporating this service bulletin by reference would unnecessarily restrict operators. The FAA did not change this AD as a result of this comment.

Request for Issue Date and Effective Date of NPRM

ANA requested that the FAA provide ANA with the issue date and effective date of the NPRM.

The FAA agrees to clarify. The issue date for the NPRM was March 20, 2026, which is included at the bottom of the NPRM after the final paragraph. NPRMs do not have an assigned effective date. The FAA did not change this AD as a result of this comment.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Material Incorporated by Reference Under 1 CFR Part 51

The FAA reviewed PW Alert Service Bulletin (ASB) PW4G-112-A72-373, dated September 10, 2025. This material specifies procedures for a visual inspection of the HPC drum rotor disk assembly for incorrect shot peen coverage. This material also provides updated inspection thresholds for visual inspection of affected HPC drum rotor disk assemblies. This material 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.

Costs of Compliance

The FAA estimates that this AD affects four engines installed on airplanes of U.S. registry. The FAA estimates that one of the four engines installed on an airplane of U.S. registry has an HPC drum rotor disk assembly installed that requires replacement of the HPC drum rotor disk assembly at the reduced life limit.

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

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Visually inspect HPC drum rotor disk assembly	10 work-hours x \$85 per hour = \$850	\$0	\$850	\$2,550
Replace HPC drum rotor disk assembly	10 work-hours x \$85 per hour = \$850	\$1,622,040	\$1,622,890	Up to \$6,491,560

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

This AD will not have federalism implications under Executive Order 13132. This AD will 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 this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) 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 Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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:

2026-17-08 Pratt & Whitney Division: Amendment 39-23451; Docket No. FAA-2026-2724; Project Identifier AD-2025-01606-E.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Pratt & Whitney Division (PW) Model PW4074D, PW4077D, PW4084D, PW4090, and PW4090-3 engines.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by the discovery of a quality escape involving incorrect shot peening on certain high-pressure compressor (HPC) drum rotor disk assemblies. The FAA is issuing this AD to prevent failure of the HPC drum rotor disk assembly. The unsafe condition, if not addressed, could result in uncontained debris 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) Definitions

For the purpose of this AD, a “part eligible for installation” is:

(1) Any HPC drum rotor disk assembly having a part number (P/N) and serial number (S/N) that is not identified in paragraph (h) of this AD.

(2) Any HPC drum rotor disk assembly having a P/N and S/N identified in paragraph (h)(1) of this AD that has passed the inspection required by paragraph (h)(1) of this AD.

(h) Required Actions

(1) For HPC drum rotor disk assemblies having P/N 50S634, and S/N CENCD26931, CENCD29577, CENCD29597, CENCD41851, or CENCD43536, as applicable, before accumulating the total life cycles since new in Table 1 of the Accomplishment Instructions of PW Alert Service Bulletin (ASB) PW4G-112-A72-373, dated September 10, 2025 (PW ASB PW4G-112-A72-373), perform a visual inspection of the HPC drum rotor disk assembly in accordance with the Accomplishment Instructions, paragraph 1.B., of PW ASB PW4G-112-A72-373.

(2) If, during the inspection required by paragraph (h)(1) of this AD, evidence of incorrect shot peening is discovered, before further flight, replace the HPC drum rotor disk assembly with a part eligible for installation.

(3) For the HPC drum rotor disk assembly having P/N 50S634 and S/N CENCD30975, before accumulating 9,800 total life cycles since new, remove the HPC drum rotor disk assembly from service and replace with a part eligible for installation.

(4) For the HPC drum rotor disk assembly having P/N 50S634 and S/N CENCD42978, before accumulating 11,000 total life cycles since new, remove the HPC drum rotor disk assembly from service and replace with a part eligible for installation.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, AIR-520 Continued Operational Safety 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 AIR-520 Continued Operational Safety Branch, send it to the attention of the person identified in paragraph (j) of this AD and email to:

AMOC@faa.gov. 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.

(j) Additional Information

For more information about this AD, contact Molly Sturgis, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (562) 627-5373; email: molly.a.sturgis@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Pratt & Whitney Division (PW) Alert Service Bulletin PW4G-112-A72-373, dated September 10, 2025.

(ii) [Reserved]

(3) For PW material identified in this AD, contact PW, 400 Main Street, East Hartford, CT 06118; phone: (800) 565-0140; email: help24@prattwhitney.com; website: connect.prattwhitney.com.

(4) You may view this material 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 (817) 222-5110.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on August 20, 2026.

Brian Knaup,
Acting Deputy Director, Integrated Certificate Management Division,
Aircraft Certification Service.

[FR Doc. 2026-18019 Filed: 9/2/2026 8:45 am; Publication Date: 9/3/2026]