Rules and Regulations

Federal Register
Vol. 88, No. 79
Tuesday, April 25, 2023

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2023–0022; Project Identifier MCAI–2022–00564–E; Amendment 39–22400; AD 2023–06–14]

RIN 2120–AA64

Airworthiness Directives; Pratt & Whitney Canada Corporation Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Pratt & Whitney Canada Corporation (P&WC) PW308A and PW308C model turbofan engines. This AD is prompted by a manufacturer's design review, which identified that the combustion chamber outer case (CCOC) to rear compressor case (RCC) flange bolt low cycle fatigue life was inadequate and that those flange bolts may develop cracks resulting in flange bolt fracture. This AD requires replacing all CCOC flange bolts and modifying the CCOC and inner bypass ducts. This AD also prohibits installation of certain flange bolts on any affected engine, as specified in a Transport Canada AD, which is proposed for incorporation by reference (IBR). The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective May 30, 2023.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 30, 2023.

ADDRESSES:

AD Docket: You may examine the AD docket at *regulations.gov* under Docket No. FAA–2023–0022; 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, the mandatory continuing airworthiness information (MCAI), 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 service information identified in this final rule, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5, Canada; phone: (888) 663–3639; email: *TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca.* You may find this material on the Transport Canada website at *tc.canada.ca/en/aviation.*
- 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 (817) 222–5110. It is also available at *regulations.gov* under Docket No. FAA–2023–0022.

FOR FURTHER INFORMATION CONTACT: Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238–7146; email: *barbara.caufield@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 P&WC PW308A model turbofan engines with build specification (BS) BS935 and BS1249, serial numbers PCE–CE0180 and prior, and PW308C model turbofan engines with BS1047 and BS1238, serial numbers PCE–CF0967 and prior. The NPRM published in the **Federal Register** on January 24, 2023 (88 FR 4111). The NPRM was prompted by Transport Canada AD CF–2022–22, dated April 25, 2022 (Transport Canada AD CF–2022–22), issued by Transport Canada, which is the aviation authority for Canada (referred to after this as the MCAI). The MCAI states that during a design review, the manufacturer identified that the existing low cycle fatigue life of the flange bolts that secure the CCOC and the RCC is inadequate. As of May 6, 2022 (the effective date of Transport Canada AD CF–2022–22), there have been no reports of cracked flange bolts, however the MCAI states there is potential that cracks could develop on the flange bolt, which could lead to fracture of the bolt. The MCAI also states that to address the potential cracking issue, P&WC introduced redesigned flange bolts made of an improved fatigue resistant material. P&WC also introduced revised procedures to modify the CCOC and the inner bypass duct flange with chamfers to reverse the installation direction of the flange bolts. The MCAI specifies installation of the redesigned bolt configuration, modifications to the CCOC and inner bypass duct, and specifies an installation prohibition for flange bolts with part numbers MS9698–08 or MS9698–09 on the affected engines.

In the NPRM, the FAA proposed to require replacing all CCOC flange bolts and modifying the CCOC and inner bypass ducts. The NPRM also proposed to prohibit installation of flange bolts with part numbers MS9698–08 and MS9698–09 on any affected engine, as specified in Transport Canada AD CF–2022–22. The FAA is issuing this AD to address the unsafe condition on these products.

You may examine the MCAI in the AD docket at *regulations.gov* under Docket No. FAA–2023–0022.

Discussion of Final Airworthiness Directive

Comments

The FAA received one anonymous comment that supported the NPRM without change.

Conclusion

These products have been approved by the aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered the comment 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, this AD is adopted as proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Transport Canada AD CF–2022–22, which specifies instructions for replacing certain CCOC flange bolts and modifying the CCOC and inner bypass ducts. Transport Canada AD CF–2022–22 also specifies an installation prohibition for flange bolts with part numbers MS9698–08 and MS9698–09 on the affected engines.

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**.

Costs of Compliance

The FAA estimates that this AD affects 668 engines installed on airplanes of U.S. registry.

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
Remove and replace all CCOC flange bolts	1.5 work-hours × $85 per hour = $128	$7,742	$7,870	$5,257,160
Modify the CCOC and inner bypass ducts	1.5 work-hours × $85 per hour = $128	0	128	85,504

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:

2023–06–14 Pratt & Whitney Canada Corporation: Amendment 39–22400; Docket No. FAA–2023–0022; Project Identifier MCAI–2022–00564–E.

(a) Effective Date

This airworthiness directive (AD) is effective May 30, 2023.

(b) Affected ADs

None.

(c) Applicability

This AD applies to:

(1) Pratt & Whitney Canada Corporation (P&WC) PW308A model turbofan engines with build specification (BS) BS935 and BS1249, serial numbers PCE–CE0180 and prior; and

(2) P&WC PW308C model turbofan engines with BS1047 and BS1238, serial numbers PCE–CF0967 and prior.

(d) Subject

Joint Aircraft Service Component (JASC) Code 7240, Turbine Engine Combustion Section.

(e) Unsafe Condition

This AD was prompted by a manufacturer's design review which identified that the combustion chamber outer case to rear compressor case flange bolts low cycle fatigue life was inadequate, and that those flange bolts may develop cracks resulting in flange bolt fracture. The FAA is issuing this AD to prevent cracking and fracture of the flange bolts. The unsafe condition, if not addressed, may result in flange bolt fracture, flange separation or case rupture, 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

Except as specified in paragraphs (h) and (i) of this AD: Perform all required actions within the compliance times specified in, and in accordance with, Transport Canada AD CF–2022–22.

(h) Exceptions to Transport Canada AD CF–2022–22

Where Transport Canada AD CF–2022–22 requires compliance from its effective date, this AD requires using the effective date of this AD.

(i) No Reporting Requirement

Although the service information referenced in Transport Canada AD CF–2022–22 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(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) of this AD or email 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) Additional Information

For more information about this AD, contact Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238–7146; email: *barbara.caufield@faa.gov*.

(l) Material Incorporated by Reference

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

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

(i) Transport Canada AD CF–2022–22, dated April 22, 2022.

(ii) [Reserved]

(3) For Transport Canada AD CF–2022–22, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5, Canada; phone: (888) 663–3639; email: *TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca.* You may find this material on the Transport Canada website at *tc.canada.ca/en/aviation.*

(4) You may view this service information at 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 service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: *fr.inspection@nara.gov,* or go to: *www.archives.gov/federal-register/cfr/ibr-locations.html.*

Issued on March 24, 2023.

Christina Underwood,

Acting Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2023–08624 Filed 4–24–23; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2023–0665; Project Identifier MCAI–2022–00625–R; Amendment 39–22405; AD 2023–07–03]

RIN 2120–AA64

Airworthiness Directives; Leonardo S.p.a. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Leonardo S.p.a. Model AB412 and AB412 EP helicopters. This AD was prompted by a report of a fatigue crack in a left-hand (LH) fin spar cap. This AD requires cleaning and repetitively inspecting certain part-numbered LH fin spar caps, and repetitively inspecting the exterior of the fin skin and, depending on the results, accomplishing corrective action. This AD also prohibits certain corrective actions as a terminating action for the repetitive inspections unless the corrective actions have been approved as a terminating action, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective May 10, 2023.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 10, 2023.

The FAA must receive comments on this AD by June 9, 2023.

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 *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.

AD Docket: You may examine the AD docket at *regulations.gov* under Docket No. FAA–2023–0665; 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, the EASA AD, any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For EASA material that is incorporated by reference (IBR) in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: *ADs@easa.europa.eu;* internet: *easa.europa.eu.* You may find this IBR material on the EASA website at *ad.easa.europa.eu.*
- You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N–321, Fort Worth, TX 76177. 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–2023–0665.

Other Related Service Information: For Leonardo Helicopters service information identified in this final rule, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G. Agusta 520, 21017 C. Costa di Samarate (Va) Italy; telephone (+39) 0331–225074; fax (+39) 0331–229046; or at *customerportal.leonardocompany.com/en-US/.* This service information is also available at the FAA contact information under *Material Incorporated by Reference* above.

FOR FURTHER INFORMATION CONTACT: Gregory Koenig, Aerospace Engineer, Airframe & Administrative Services Section, Chicago ACO Branch, Compliance & Airworthiness Division, FAA, 2300 E Devon Ave., Des Plaines, IL 60018; telephone (847) 294–7127; email *Gregory.L.Koenig@faa.gov*.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under **ADDRESSES**. Include ''Docket No. FAA–2023–0665; Project Identifier MCAI–2022–00625–R'' at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, 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 this final rule because of those comments.

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 *regulations.gov*, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

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 AD 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 AD, it is important that you clearly designate