(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) 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.

(3) The following service information was approved for IBR on November 22, 2021 (86 FR 57574, October 18, 2021).

(i) Leonardo Helicopters Alert Service Bulletin No. 139–609, Revision A, dated April 13, 2021.

(ii) [Reserved]

(4) For service information identified in this AD, 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/.*

(5) You may view this service information at 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.

(6) 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 December 20, 2022.

Christina Underwood,

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

[FR Doc. 2022–28090 Filed 12–23–22; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2022–1306; Project Identifier AD–2022–01040–E; Amendment 39–22289; AD 2022–27–04]

RIN 2120–AA64

Airworthiness Directives; Pratt & Whitney Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Pratt & Whitney (PW) PW1519G, PW1521G, PW1521G–3, PW1521GA, PW1524G, PW1524G–3, PW1525G, and PW1525G–3 model turbofan engines. This AD was prompted by an uncommanded dual engine shutdown upon landing, resulting in compromised braking capability due to the loss of engine power and hydraulic systems. This AD requires removal from service of certain electronic engine control (EEC) full authority digital engine control (FADEC) software versions and replacement with updated software. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective January 31, 2023.

ADDRESSES: *AD Docket:* You may examine the AD docket at *regulations.gov* by searching for and locating Docket No. FAA–2022–1306; 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.

FOR FURTHER INFORMATION CONTACT: Mark Taylor, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238–7229; email: *Mark.Taylor@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 all PW PW1519G, PW1521G, PW1521G–3, PW1521GA, PW1524G, PW1524G–3, PW1525G, and PW1525G–3 model turbofan engines. The NPRM published in the **Federal Register** on October 25, 2022 (87 FR 64397). The NPRM was prompted by a report that an airplane experienced an uncommanded dual engine shutdown upon landing, resulting in compromised braking capability due to the loss of engine power and hydraulic systems. A subsequent investigation determined that the sequence of the auto-throttle increasing throttle to maintain Mach number, immediately followed by pilot command to decrease throttle to idle, caused a transient disagreement between actual and commanded thrust. This disagreement triggered the thrust control malfunction (TCM) detection logic and resulted in dual engine shutdown once the weight on wheels signal was activated upon landing. The installed EEC FADEC software version latches the fault and allows the engine to continue operation as commanded but shuts down the engine upon landing. The manufacturer identified the situations that could trigger the TCM logic erroneously and updated the EEC FADEC software. This software update makes corrective improvements to the TCM logic, including revised criteria for triggering the TCM logic and establishing criteria that permit the TCM logic to unlatch during flight. In the NPRM, the FAA proposed to require removal from service of certain EEC FADEC software versions and replacement with a software version eligible for installation. The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final Airworthiness Directive

Comments

The FAA received one comment, from Air Line Pilots Association, International (ALPA). ALPA supported the NPRM without change.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting the 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

The FAA reviewed PW Service Bulletin (SB) PW1000G–A–73–00–0054–00A–930A–D, Issue No. 002, dated June 20, 2022. This service information specifies procedures for replacing or modifying the EEC to incorporate FADEC software version V2.11.14.

Costs of Compliance

The FAA estimates that this AD affects 147 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
Upgrade EEC FADEC Software	2 work-hours × $85 per hour = $170	$0	$170	$24,990

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:

2022–27–04 Pratt & Whitney: Amendment 39–22289; Docket No. FAA–2022–1306; Project Identifier AD–2022–01040–E.

(a) Effective Date

This airworthiness directive (AD) is effective January 31, 2023.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Pratt & Whitney PW1519G, PW1521G, PW1521G–3, PW1521GA, PW1524G, PW1524G–3, PW1525G, and PW1525G–3 model turbofan engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7600, Engine Controls.

(e) Unsafe Condition

This AD was prompted by an uncommanded dual engine shutdown upon landing, resulting in compromised braking capability due to the loss of engine power and hydraulic systems. The FAA is issuing this AD to prevent compromised braking capability due to uncommanded dual engine shutdown upon landing. The unsafe condition, if not addressed, could result in runway excursion.

(f) Compliance

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

(g) Required Actions

For affected engines with installed electronic engine control (EEC) full authority digital engine control (FADEC) software version earlier than V2.11.14.1, within 12 months after the effective date of this AD, remove the EEC FADEC software and replace with an EEC FADEC software version eligible for installation.

(h) Definitions

For the purpose of this AD, ''EEC FADEC software version eligible for installation'' is EEC FADEC software version V2.11.14.1 or later.

(i) 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 (j) of this AD and 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.

(j) Related Information

For more information about this AD, contact Mark Taylor, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238–7229; email: *Mark.Taylor@faa.gov.*

(k) Material Incorporated by Reference

None.

Issued on December 20, 2022.

Christina Underwood,

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

[FR Doc. 2022–28091 Filed 12–23–22; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2022–1574; Project Identifier MCAI–2022–01362–T; Amendment 39–22274; AD 2022–25–18]

RIN 2120–AA64

Airworthiness Directives; BAE Systems (Operations) Limited Airplanes; Correction

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comment; correction.

SUMMARY: The FAA is correcting an airworthiness directive (AD) that was published in the **Federal Register**. That AD applies to certain BAE Systems (Operations) Limited Model BAe 146 and Model Avro 146–RJ series airplanes. As published, the identity of certain airplanes in the preamble and regulatory