

airworthiness; or within 108,000 flight hours after accomplishment of the actions specified in Boeing Service Bulletin 777-47-0002; or within 108,000 flight hours after the most recent inspection was performed as specified in AWL 47-AWL-04; whichever occurs latest.

(9) For AWL 47-AWL-05, “NGS—Cross Vent Check Valve”: Within 10,682 flight hours after the date of issuance of the original airworthiness certificate or the date of issuance of the original export certificate of airworthiness; or within 10,682 flight hours after accomplishment of the actions specified in Boeing Service Bulletin 777-47-0002; or within 10,682 flight hours after the most recent inspection was performed as specified in AWL 47-AWL-05; whichever occurs latest.

(10) For AWL 47-AWL-06, “NGS—NEA Distribution Ducting Integrity”: Within 10,682 flight hours after the date of issuance of the original airworthiness certificate or the date of issuance of the original export certificate of airworthiness; or within 10,682 flight hours after accomplishment of the actions specified in Boeing Service Bulletin 777-47-0002; or within 10,682 flight hours after the most recent inspection was performed as specified in AWL 47-AWL-06; whichever occurs latest.

(h) Exceptions to February 2021 Revision of Section 9

The following exceptions apply to 28-AWL-31 and 28-AWL-32 of Section D, “Airworthiness Limitations—Systems,” including Subsections D.1, D.2, and D.3, of Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D622W001-9, dated February 2021, of Boeing 777-200/200LR/300/300ER/777F Maintenance Planning Data (MPD) Document.

(1) In paragraph 1.i., change “Front Spar Bulkhead (Center Tank)” to “Front Spar Bulkhead (Center Wing Tank Fuel Quantity Greater than 12,400 Gallons).”

(2) In paragraph 1.j., change “Rear Spar Bulkhead (Center Tank)” to “Rear Spar Bulkhead (Center Wing Tank Fuel Quantity Greater than 12,400 Gallons).”

(i) Additional Acceptable Wire Types and Sleeving

As an option, when accomplishing the actions required by paragraph (g) of this AD, the changes specified in paragraphs (i)(1) and (2) of this AD are acceptable.

(1) Where AWL 28-AWL-11 identifies wire types BMS 13-48, BMS 13-58, and BMS 13-60, the following wire types are acceptable: MIL-W-22759/16, SAE AS22759/16 (M22759/16), MIL-W-22759/32, SAE AS22759/32 (M22759/32), MIL-W-22759/34, SAE AS22759/34 (M22759/34), MIL-W-22759/41, SAE AS22759/41 (M22759/41), MIL-W-22759/86, SAE AS22759/86 (M22759/86), MIL-W-22759/87, SAE AS22759/87 (M22759/87), MIL-W-22759/92, and SAE AS22759/92 (M22759/92); and MIL-C-27500 and NEMA WC 27500 cables constructed from these military or SAE specification wire types, as applicable.

(2) Where AWL 28-AWL-11 identifies TFE-2X Standard wall (manufactured as

specified in MIL-I-23053) for wire sleeving, the following sleeving materials are acceptable: Roundit 2000NX and Varglas Type HO, HP, or HM.

(j) No Alternative Actions, Intervals, or Critical Design Configuration Control Limitations (CDCCLs)

After the existing maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections), intervals, or CDCCLs may be used unless the actions, intervals, and CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (l) of this AD.

(k) Terminating Actions

Accomplishment of the revision required by paragraph (g) of this AD terminates the requirements specified in paragraphs (k)(1) and (2) of this AD for that airplane.

(1) All requirements of AD 2008-11-13 for Model 777-200, -200LR, -300, and -300ER series airplanes only.

(2) All requirements of AD 2014-09-09.

(l) 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 (m) 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.

(m) Related Information

For more information about this AD, contact Kevin Nguyen, Aerospace Engineer, Propulsion Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3555; email: kevin.nguyen@faa.gov.

(n) 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.

(i) Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D622W001-9, dated November 2019, of Boeing 777-200/200LR/300/300ER/777F Maintenance Planning Data (MPD) Document.

(ii) Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D622W001-9, dated February 2021, of Boeing 777-200/200LR/300/300ER/777F Maintenance Planning Data (MPD) Document.

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; internet <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(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, fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on November 16, 2021.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021-28133 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-2021-0564; Project Identifier AD-2020-01350-T; Amendment 39-21823; AD 2021-24-02]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all The Boeing Company Model MD-11 and MD-11F airplanes. This AD was prompted by reports indicating incidents of wires chafing against the inboard upper corner of the observer station circuit breaker panel. This AD requires, depending on airplane configuration, doing a general visual inspection of the right observer station upper main circuit breaker panel and wiring for certain missing parts; doing

an inspection of the right observer station upper main circuit breaker panel to determine if a certain bracket part number is installed; doing a general visual inspection of certain wire assemblies for any damage; modifying the observer station upper main circuit breaker panel; and applicable on-condition actions. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective February 1, 2022.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of February 1, 2022.

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety 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 at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0564.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0564; 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: Eric Igama, Aerospace Engineer, Systems and Equipment Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5388; fax: 562-627-5210; email: Roderick.Igama@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 The Boeing Company Model MD-11 and MD-11F airplanes. The NPRM published in the **Federal Register** on August 18, 2021 (86 FR 46167). The NPRM was prompted by reports indicating incidents of wires chafing against the inboard upper corner of the observer station circuit breaker panel. In the NPRM, the FAA proposed to require, depending on airplane configuration, doing a general visual inspection of the right observer station upper main circuit breaker panel and wiring for certain missing parts; doing an inspection of the right observer station upper main circuit breaker panel to determine if a certain bracket part number is installed; doing a general visual inspection of certain wire assemblies for any damage; modifying the observer station upper main circuit breaker panel; and applicable on-condition actions. The FAA is issuing this AD to address wire chafing and arcing on the panel, which could cause damage to equipment, and result in loss of electrical power and a possible in-flight fire.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from The Air Line Pilots Association, International (ALPA) and Boeing who supported the NPRM without change.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and

determined that air safety requires adopting this AD as proposed. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information Under 1 CFR part 51

The FAA reviewed Boeing Alert Service Bulletin MD11-24A204, Revision 2, dated April 14, 2021. For certain airplanes, this service information describes procedures for doing a general visual inspection of the right observer station upper main circuit breaker panel and wiring for missing installation of sleeving, grommets, and spacers; doing an inspection of the right observer station upper main circuit breaker panel to determine if bracket part number SR11240046-11 is installed; and applicable on-condition actions. On-condition actions include repairing or replacing damaged wires, installing sleeves and routing wires, trimming and re-identifying the bracket, and replacing any missing grommets or spacers.

For certain other airplanes, this service information describes procedures for doing a general visual inspection of wire assemblies ABS9110 and ABS9115 for any damage (*i.e.*, wire chafing, arcing), modifying the observer station upper main circuit breaker panel, and applicable on-condition actions. On-condition actions include repairing or replacing damaged wires.

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 118 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
Inspections	Up to 17 work-hours × \$85 per hour = up to \$1,445.	\$0	Up to \$1,445	Up to \$170,510

The FAA estimates the following costs to do any necessary actions that would be required based on the results

of the inspection. The FAA has no way of determining the number of aircraft that might need these actions:

ON-CONDITION COSTS *

Action	Labor cost	Parts cost	Cost per product
Replacement, installation and trimming ..	Up to 3 work-hours × \$85 per hour = up to \$255.	\$428	Up to \$683

* The FAA has received no definitive data on which to base the cost estimates for the on-condition repairs specified in this AD.

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

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:

2021–24–02 The Boeing Company:
Amendment 39–21823; Docket No. FAA–2021–0564; Project Identifier AD–2020–01350–T.

(a) Effective Date

This airworthiness directive (AD) is effective February 1, 2022.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model MD–11 and MD–11F airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 24, Electrical power.

(e) Unsafe Condition

This AD was prompted by reports indicating incidents of wires chafing against the inboard upper corner of the observer station circuit breaker panel. The FAA is issuing this AD to address wire chafing and arcing on the panel, which could cause damage to equipment, and result in loss of electrical power and a possible in-flight fire.

(f) Compliance

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

(g) Required Actions

Except as specified in paragraph (h) of this AD: At the applicable times specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin MD11–24A204, Revision 2, dated April 14, 2021, do all applicable actions identified as "RC" (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin MD11–24A204, Revision 2, dated April 14, 2021.

(h) Exception to Service Information Specifications

Where Boeing Alert Service Bulletin MD11–24A204, Revision 2, dated April 14, 2021, uses the phrase "the Revision 2 date of this service bulletin," this AD requires using "the effective date of this AD."

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles 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 Related Information. Information may be emailed to: 9-ANM-LAACO-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, Los Angeles 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.

(4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (i)(4)(i) and (ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled "RC Exempt," then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(j) Related Information

For more information about this AD, contact Eric Igama, Aerospace Engineer, Systems and Equipment Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712–4137;

phone: 562-627-5388; fax: 562-627-5210; email: Roderick.Igama@faa.gov.

(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.

(i) Boeing Alert Service Bulletin MD11-24A204, Revision 2, dated April 14, 2021.

(ii) [Reserved]

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; internet <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(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, fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on November 9, 2021.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021-27958 Filed 12-27-21; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-1069; Project Identifier AD-2021-00308-E; Amendment 39-21862; AD 2021-26-04]

RIN 2120-AA64

Airworthiness Directives; Engine Alliance Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2019-18-08 which applied to all Engine Alliance (EA) GP7270 and GP7277 model turbofan engines. AD 2019-18-08 required a visual inspection of the engine fan hub assembly, initial and repetitive eddy current inspections (ECIs) of the engine fan hub blade slot bottom and blade slot front edge for

cracks, and replacement of the engine fan hub blade lock assembly for certain affected engines. This AD continues to require initial and repetitive ECIs and adds an ultrasonic test (UT) inspection. This AD also lowers the repetitive ECI threshold, and requires an independent inspection of the engine fan hub assembly at the next disassembly and the next reassembly of the engine fan hub blade lock assembly and a visual inspection of the engine fan hub assembly for damage. This AD also requires replacement of the engine fan hub assembly with a part eligible for installation if damage is found outside serviceable limits. This AD was prompted by an uncontained failure of the engine fan hub. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective January 12, 2022.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of January 12, 2022.

The FAA must receive any comments on this AD by February 11, 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 final rule, contact Engine Alliance, 411 Silver Lane, East Hartford, CT 06118; phone: (800) 565-0140; email: help24@pw.utc.com; website: www.engineallianceportal.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 (817) 222-5110. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1069.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1069; 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 street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT:

Stephen Elwin, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7236; fax: (781) 238-7199; email: Stephen.L.Elwin@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued AD 2019-18-08, Amendment 39-19735 (84 FR 49944, September 24, 2019), (AD 2019-18-08), for all EA GP7270 and GP7277 model turbofan engines. AD 2019-18-08 required, for certain GP7270 and GP7277 model turbofan engines, an initial and repetitive ECI of the engine fan hub blade slot bottom and blade slot front edge for cracks. For all GP7270 and GP7277 model turbofan engines, AD 2019-18-08 also required an independent inspection of the engine fan hub assembly prior to the reassembly of the engine fan hub blade lock assembly and a visual inspection of the engine fan hub assembly for damage. For certain serial numbered GP7270 and GP7277 model turbofan engines, AD 2019-18-08 required replacement of the engine fan hub blade lock assembly with a part eligible for installation. AD 2019-18-08 resulted from the manufacturer identifying a fatigue crack originating inboard of a blade slot after the manufacturer performed a metallurgical examination of the engine fan hub that was recovered, related to an uncontained engine hub failure that occurred on September 30, 2017. After performing a risk assessment, the manufacturer determined the need to reduce the compliance time for the initial ECI and add a repetitive ECI. The FAA issued AD 2019-18-08 to detect defects, damage, and cracks that could result in an uncontained failure of the engine fan hub assembly.

Actions Since AD 2019-18-08 Was Issued

Since the FAA issued AD 2019-18-08, EA has revised its Alert Service Bulletin, reducing the repetitive ECI interval from 330 cycles to 290 cycles, and adding an inner diameter UT inspection of the rim area for cracks. EA published EA Turbojet Engine Alert Service Bulletin (ASB) No. EAGP7-A72-389, Revision No. 7, dated October 8, 2021, to update the repetitive inspection interval for performing the ECIs and add UT inspections. The FAA