DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


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 certain The Boeing Company Model 777–300ER series airplanes. This AD was prompted by a report that a production design change to certain insulation blankets inadvertently opened up leakage paths for halon and smoke to escape from the aft cargo compartment in the event of a fire. This AD requires installation of an insulation blanket assembly on top of existing insulation blankets in certain areas of the forward endwall in the aft cargo compartment. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective August 19, 2021.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of August 19, 2021.

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster 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 98198; phone and fax: 206–231–3986; email: courtney.a.kronenberger@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 The Boeing Company Model 777–300ER series airplanes. The NPRM published in the Federal Register on December 29, 2020 (85 FR 85557). The NPRM was prompted by report indicating that a production design change to certain insulation blankets inadvertently opened up leakage paths for halon and smoke to escape from the aft cargo compartment in the event of a fire. In the NPRM, the FAA proposed to require installation of an insulation blanket assembly on top of existing insulation blankets in certain areas of the forward endwall in the aft cargo compartment. The FAA is issuing this AD to address increased leakage paths for halon and smoke to escape from the aft cargo compartment in the event of a fire.

Discussion of Final Airworthiness Directive

Comments

The FAA received additional comments from one commenter, United Airlines, who supported the NPRM without change. The FAA received additional comments from one commenter, United Airlines. The following presents the comments received on the NPRM and the FAA’s response to each comment.

Request for Update to Illustrated Parts Catalog (IPC)

United Airlines stated that it agrees with the intent of the proposed AD. United Airlines also recommended that Boeing update the applicable IPC to show configuration control of the new part numbers that are installed during the accomplishment of the actions specified in the referenced service information. United Airlines noted that the update would provide proper configuration control and documentation support to maintain the new insulation blanket installation changes made prior to the release of the AD. United Airlines also asserted that the change could mitigate incorrect blanket installation.

The FAA acknowledges the commenter’s recommendation and reasoning. However, the FAA does not control or require changes to the IPC. The FAA has not changed this AD in this regard.

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 Special Attention Requirements Bulletin 777–25–0753 RB, dated July 31, 2020. This service information specifies procedures for installing an insulation blanket assembly on top of existing insulation blankets on the left and right side corner of the forward endwall in the aft cargo compartment. 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 22 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulation blanket installation</td>
<td>1 work-hour × $85 per hour = $85 ..........</td>
<td>$240</td>
<td>$325</td>
<td>$7,150</td>
</tr>
</tbody>
</table>
According to the manufacturer, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators. The FAA does not control warranty coverage for affected operators. As a result, the FAA has included all known costs in the cost estimate.

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 47701: 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 rulemaking 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 PROJECT NO. 15021–000

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended] Project No. 15021–000

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021–13–02 The Boeing Company:


(a) Effective Date

This airworthiness directive (AD) is effective August 19, 2021.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 777–300ER series airplanes, certificated in any category, as identified in Boeing Special Attention Requirements Bulletin 777–25–0753 RB, dated July 31, 2020.

(d) Subject

Air Transport Association (ATA) of America Code 25, Equipment/Furnishings.

(e) Unsafe Condition

This AD was prompted by a report that a production design change to certain insulation blankets inadvertently opened up leakage paths for halon and smoke to escape from the aft cargo compartment in the event of a fire. The FAA is issuing this AD to address increased leakage paths, which, in the event of a fire, could result in loss of fire suppressant in the cargo compartment, and could lead to an uncontained fire and subsequent loss of the airplane.

(f) Compliance

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

(g) Required Actions

Except as specified by paragraph (h) of this AD: At the applicable times specified in the “Compliance” paragraph of Boeing Special Attention Requirements Bulletin 777–25–0753 RB, dated July 31, 2020, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Special Attention Requirements Bulletin 777–25–0753 RB, dated July 31, 2020.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Special Attention Service Bulletin 777–25–0753, dated July 31, 2020, which is referred to in Boeing Special Attention Requirements Bulletin 777–25–0753 RB, dated July 31, 2020.

(h) Exceptions to Service Information Specifications

Where Boeing Special Attention Requirements Bulletin 777–25–0753 RB, dated July 31, 2020, uses the phrase “the original issue date of the Requirements Bulletin 777–25–0753 RB,” this AD requires using “the effective date of this AD.”

(i) 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 (j)(1) of this AD. Information may be emailed to AMN-Seattle-ACO-AMOC-Requests@faa.gov.

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

(2) 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.

(j) Related Information

(1) For more information about this AD, contact Courtney Kronenberger, Aerospace Engineer, Cabin Safety and Environmental Systems Section, F.A.A. Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206–231–3986; email: courtney.a.kronenberger@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (k)(3) and (4) of this AD.

(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.


(ii) [Reserved]


(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
DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


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 certain The Boeing Company Model 777 airplanes. This AD was prompted by reports indicating that during investigation of a fuel leak, fatigue cracking was found on the forward inboard side of the fuel tank access door cutouts on the left and right lower wing skin. The cause of the cracking is attributed to corrosion damage. This AD requires repetitive inspections for any existing repair of the wing lower skin fuel tank and dry bay access door cutouts on the left and right lower wing skin, and applicable on-condition actions. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective August 19, 2021. The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of August 19, 2021.

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&D) Services, 2600 Westminster 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–2020–0981.

EXAMINING THE AD DOCKET


FOR FURTHER INFORMATION CONTACT: Luis A. Cortez-Muniz, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206–231–3958; email: luis.a.cortez-muniz@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 The Boeing Company Model 777 airplanes. The NPRM published in the Federal Register on November 18, 2020 (85 FR 73430). The NPRM was prompted by reports indicating that during investigation of a fuel leak, fatigue cracking was found on the forward inboard side of the fuel tank access door cutouts on the left and right lower wing skin. The cause of the cracking is attributed to corrosion damage. In the NPRM, the FAA proposed to require repetitive inspections for any existing repair of the wing lower skin fuel tank and dry bay access door cutouts on the left and right lower wing skin, and applicable on-condition actions. The FAA is issuing this AD to address fatigue cracking which could result in the inability of a principal structural element to sustain limit load, and consequent reduced structural integrity of the airplane.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from Boeing and United Airlines. Those commenters supported the NPRM without change.

The FAA received additional comments from six commenters, including AeroLogic, Air France, American Airlines, Emirates, FedEx Express (FedEx), and one individual. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request To Change Exception

Air France stated that paragraph (b)(1) of the proposed AD would require using “the effective date of this AD,” except where Boeing Alert Requirements Bulletin 777–57A0118 RB, dated June 23, 2020, uses the phrase “the original issue date of Requirements Bulletin 777–57A0118 RB” in a note or flag note. Air France noted that making the exception depend on a note or flag note is confusing. Air France asked that the FAA re-evaluate and extend the initial and repetitive calendar-based compliance times in the proposed AD to match heavy maintenance intervals. The commenters stated that the 1,125-day compliance time does not align with existing MPD intervals of 3,000 days and 4,500 days or the existing heavy maintenance intervals. One commenter stated that, as a long-range freight specialist it has an average flight hour/flight cycle ratio of 6.0 to 6.3, thus reaching the flight hour LOV of the Model 777F before reaching the flight cycle utilization that the aircraft with crack findings had at the time of crack detection. The commenters also stated that more frequent opening and closing of the access doors could increase the chance of corrosion, although the airplane with the initial crack finding was 19 years old at the time cracking was found, and Boeing reported that only minimal corrosion was found during lab testing of the cracking.

The FAA does not agree with the requests to extend the compliance time. The compliance times were coordinated with the design approval holder based on its analysis and fleet findings. Additionally, the commenters did not provide substantiation data that shows that the proposed extended inspection intervals provide adequate crack detection. However, under the provisions of paragraph (i) of this AD, the FAA will consider requests for approval of an extension of the compliance time if sufficient data are submitted to substantiate that the extension would provide an acceptable level of safety. This AD has not been changed in this regard.

Request To Revise Compliance Time

AeroLogic, Air France, American Airlines, and Emirates asked that the FAA re-evaluate and extend the initial and repetitive calendar-based compliance times in the proposed AD to match heavy maintenance intervals. The commenters stated that the 1,125-day compliance time does not align with existing MPD intervals of 3,000 days and 4,500 days or the existing heavy maintenance intervals. One commenter stated that, as a long-range freight specialist it has an average flight hour/flight cycle ratio of 6.0 to 6.3, thus reaching the flight hour LOV of the Model 777F before reaching the flight cycle utilization that the aircraft with crack findings had at the time of crack detection. The commenters also stated that more frequent opening and closing of the access doors could increase the chance of corrosion, although the airplane with the initial crack finding was 19 years old at the time cracking was found, and Boeing reported that only minimal corrosion was found during lab testing of the cracking.

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