



適航指令發布單

Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2019-06-011	發布日期 Date issued	2019/6/25
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	This AD applies to The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 777-53A0081, Revision 2, dated March 29, 2019.		
主旨摘要	This AD required repetitive inspections of the left and right side underwing longerons for any crack.		
民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	設計國民航主管機構 Original Authorities <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input checked="" type="checkbox"/> FAA <input type="checkbox"/> EASA <input type="checkbox"/> Brazil <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> DGAC </div> <div style="width: 48%;"> <input type="checkbox"/> Germany LBA <input type="checkbox"/> CAA-NL <input type="checkbox"/> UK CAA <input type="checkbox"/> Japan CAB <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____ </div> </div>		
	設計國 AD 編號 Original AD number	2019-11-02	
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	ATA 53. This AD is superseding 2017-16-10 (CAA-2017-08-007) Ref. Boeing Alert Service Bulletin 777-53A0081, Revision 2, dated March 29, 2019.		
註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw			

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-0407; Product Identifier 2019-NM-075-AD; Amendment 39-19648; AD 2019-11-02]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2017-16-10, which applied to all The Boeing Company Model 777 airplanes. AD 2017-16-10 required repetitive inspections of the left and right side underwing longerons for any crack, and related investigative and corrective actions if necessary. This AD retains the requirements of AD 2017-16-10, reduces certain compliance times for certain airplanes, and removes airplanes from the applicability. This AD was prompted by reports of cracks on the underwing longerons. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective July 5, 2019.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of July 5, 2019.

The FAA must receive any comments on this AD by August 5, 2019.

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 <http://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 Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; phone: 562-797-1717; internet: <https://www.myboeingfleet.com>. You may

view this service information at the FAA, Transport Standards 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 on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0407.

Examining the AD Docket

You may examine the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0407; 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 regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Eric Lin, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3523; email: eric.lin@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued AD 2017-16-10, Amendment 39-18987 (82 FR 39513, August 21, 2017) (“AD 2017-16-10”), for all The Boeing Company Model 777 airplanes. AD 2017-16-10 required repetitive inspections of the left and right side underwing longerons for any crack, and related investigative and corrective actions if necessary. AD 2017-16-10 resulted from reports of cracks on the underwing longerons. The FAA issued AD 2017-16-10 to address cracks in the underwing longerons, which could result in fuel leakage into the forward cargo area and consequent increased risk of a fire or, in a more severe case, could adversely affect the structural integrity of the airplane.

Actions Since AD 2017-16-10 Was Issued

Since we issued AD 2017-16-10, the FAA has determined that it is necessary to reduce certain compliance times for certain airplanes to address the unsafe condition. The FAA has also determined that it is necessary to remove certain airplanes from the applicability because the unsafe condition has been addressed in production on line numbers 1523, and 1525 and subsequent. The FAA is issuing this AD to address cracks in the underwing longerons, which could result in fuel leakage into the forward cargo area and consequent increased risk of a fire or, in a more severe case, could adversely affect the structural integrity of the airplane.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Boeing Alert Service Bulletin 777-53A0081, Revision 2, dated March 29, 2019. This service information describes procedures for repetitive detailed inspections, ultrasonic inspections, high frequency eddy current (HFEC) inspections of the left and right side underwing longerons, a surface HFEC inspection of the external surface of the fuselage skin, and applicable on-condition actions. On condition actions include replacement of the left or right underwing longeron, as applicable. 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 the ADDRESSES section.

FAA's Determination

The FAA is issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

AD Requirements

Although this AD does not explicitly restate the requirements of AD 2017-16-10, this AD retains all of the requirements of AD 2017-16-10. Those requirements are referenced in the service information identified previously, which, in turn, is referenced in paragraph (g) of this AD. This AD reduces certain compliance times for certain airplanes and removes airplanes from the applicability. This AD also requires accomplishment of the actions identified as "RC" (required for compliance) in the Accomplishment Instructions of Boeing Alert Service Bulletin 777-53A0081, Revision 2, dated March 29, 2019, described previously.

For information on the procedures and compliance times, see this service information at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0407.

FAA's Justification and Determination of the Effective Date

There are currently no U.S. operators affected by the new reduced compliance times required by this AD. Therefore, we find good cause that notice and opportunity for prior public comment are unnecessary. In addition, for the reason(s) stated above, the FAA finds that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, the FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2019-0407 and Product Identifier 2019-NM-075-AD at the beginning of your comments. The agency specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. The agency will consider all comments received by the closing date and may amend this final rule because of those comments.

The FAA will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact the agency receives about this final rule.

Costs of Compliance

The FAA estimate that this AD affects 214 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated Costs				
Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Option 1: Detailed Inspection (retained actions from AD 2017-16-10)	4 work-hours × \$85 per hour = \$340 per inspection cycle	\$0	\$340 per inspection cycle	\$72,760 per inspection cycle.

Option 2: Detailed and HFEC or Ultrasonic Inspection (retained actions from AD 2017-16-10)	12 work-hours × \$85 per hour = \$1,020 per inspection cycle	\$0	\$1,020 per inspection cycle	\$218,280 per inspection cycle.
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The new requirements of this AD (reduced compliance times) do not currently affect U.S. operators and, therefore, add no additional economic burden.

The FAA estimates the following costs to do any necessary replacements that would be required based on the results of the inspections. The agency has no way of determining the number of aircraft that might need these replacements:

On-Condition Costs

Action	Labor cost	Parts cost	Cost per product
Left side or right side underwing longeron replacement	102 work-hours × \$85 per hour = \$8,670 per side	\$31,000 per side	\$39,670 per side.

The FAA has received no definitive data that would enable us to provide cost estimates for the on-condition actions, other than the replacement, specified in this AD.

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 individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all known costs in our 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 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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

The FAA has determined that 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.

Adoption of 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 removing Airworthiness Directive (AD) 2017-16-10, Amendment 39-18987 (82 FR 39513, August 21, 2017), and adding the following new AD:



2019-11-02 The Boeing Company: Amendment 39-19648; Docket No. FAA-2019-0407; Product Identifier 2019-NM-075-AD.

(a) Effective Date

This AD is effective July 5, 2019.

(b) Affected ADs

This AD replaces AD 2017-16-10, Amendment 39-18987 (82 FR 39513, August 21, 2017) (“AD 2017-16-10”).

(c) Applicability

This AD applies to The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 777-53A0081, Revision 2, dated March 29, 2019.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by reports of cracks on the underwing longerons. The FAA is issuing this AD to address cracks in the underwing longerons, which could result in fuel leakage into the forward cargo area and consequent increased risk of a fire or, in a more severe case, could adversely affect the structural integrity of the airplane.

(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 777-53A0081, Revision 2, dated March 29, 2019, do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin 777-53A0081, Revision 2, dated March 29, 2019. Replacing an underwing longeron, including doing all applicable on-condition actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-53A0081, Revision 2, dated March 29, 2019, except as required by paragraph (h)(2) of this AD, terminates the repetitive inspections specified in tables 1 through 6 and table 15 of paragraph 1.E.,

“Compliance,” of Boeing Alert Service Bulletin 777-53A0081, Revision 2, dated March 29, 2019, for that longeron only.

(h) Exceptions to Service Information Specifications

(1) For purposes of determining compliance with the requirements of this AD: Where Boeing Alert Service Bulletin 777-53A0081, Revision 2, dated March 29, 2019, uses the phrase “the Revision 2 date of this service bulletin,” this AD requires using “the effective date of this AD.”

(2) Where Boeing Alert Service Bulletin 777-53A0081, Revision 2, dated March 29, 2019, specifies contacting Boeing for repair instructions: This AD requires doing the repair using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(i) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 777-53A0081, dated September 8, 2016, or Boeing Alert Service Bulletin 777-53A0081, Revision 1, dated May 1, 2017.

(j) 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 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)(1) 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 local flight standards district office/certificate holding district 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.

(4) AMOCs approved previously for AD 2017-16-10 are approved as AMOCs for the corresponding provisions of Boeing Alert Service Bulletin 777-53A0081, Revision 2, dated March 29, 2019, that are required by paragraph (g) of this AD.

(5) Except as specified by paragraph (h)(2) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (j)(5)(i) and (j)(5)(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.

(k) Related Information

(1) For more information about this AD, contact Eric Lin, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3523; email: eric.lin@faa.gov.

(2) 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; phone: 562-797-1717; internet: <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(l) 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 777-53A0081, Revision 2, dated March 29, 2019.

(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; phone: 562-797-1717; internet: <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Transport Standards 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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on June 5, 2019.

Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.