



適航指令發布單
Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2019-02-007	發布日期 Date issued	2019/2/13
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	The Boeing Company Model 787-8, 787-9, and 787-10 airplanes, certificated in any category.		
主旨摘要	This AD requires revising the existing maintenance or inspection program on warpage of internal engine fire handle components		
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 <input checked="" type="checkbox"/> FAA <input type="checkbox"/> EASA <input type="checkbox"/> Brazil <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> DGAC <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 _____		
	設計國 AD 編號 Original AD number	2019-02-03	
	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	None		
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			

[Federal Register Volume 84, Number 26 (Thursday, February 7, 2019)]

[Rules and Regulations]

[Pages 2437-2441]

From the Federal Register Online via the Government Publishing Office [www.gpo.gov]

[FR Doc No: 2019-01244]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-0015; Product Identifier 2018-NM-179-AD; Amendment 39-19550; AD 2019-02-03]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for all The Boeing Company Model 787-8, 787-9, and 787-10 airplanes. This AD requires revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. This AD was prompted by reports of warpage of internal engine fire handle components, which can cause binding and prevent proper operation. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective February 22, 2019.

We must receive comments on this AD by March 25, 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.

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-2019-0015; 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 (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Rebel Nichols, Aerospace Engineer, Propulsion Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3556; email: Rebel.Nichols@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We have received reports from Boeing of warpage of internal engine fire handle components, which can cause binding and prevent proper operation. A latently failed engine fire handle could prevent the fire extinguishing agent from being able to be released. In the event of certain engine fires, the potential exists for an engine fire to be uncontrollable. This unsafe condition, if not addressed, could result in the inability to extinguish an engine fire that, if uncontrollable, could lead to wing failure.

FAA's Determination

We are 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

This AD requires revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations.

Compliance with these actions is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (j) of this AD.

Interim Action

We consider this AD interim action. The manufacturer is currently developing a terminating action that will address the unsafe condition identified in this AD. Once this terminating action is developed, approved, and available, we might consider additional rulemaking.

FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because warpage of internal engine fire handle components can cause binding and prevent proper operation. A latently failed engine fire handle could prevent the fire extinguishing agent from being able to be released. In the event of certain engine fires, the potential exists for an engine fire to be uncontrollable, which could lead to wing failure. Additionally, the compliance time for the required action is shorter than the time necessary for the public to comment and for publication of the final rule. Therefore, we find good

cause that notice and opportunity for prior public comment are impracticable. In addition, for the reasons stated above, we find 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, we invite 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-2019-0015 and Product Identifier 2018-NM-179-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. We will consider all comments received by the closing date and may amend this final rule because of those comments.

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

Costs of Compliance

We estimate that this AD affects 120 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

We have determined that revising the existing maintenance or inspection program takes an average of 90 work-hours per operator, although we recognize that this number may vary from operator to operator. In the past, we have estimated that this action takes 1 work-hour per airplane. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), we have determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, we estimate the total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

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.

We are 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

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) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) 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 adding the following new airworthiness directive (AD):



2019-02-03 The Boeing Company: Amendment 39-19550; Docket No. FAA-2019-0015; Product Identifier 2018-NM-179-AD.

(a) Effective Date

This AD is effective February 22, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 787-8, 787-9, and 787-10 airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 26, Fire protection.

(e) Unsafe Condition

This AD was prompted by reports of warpage of internal fire handle components, which can cause binding and prevent proper operation. We are issuing this AD to address a latent failure of the engine fire handle, which could result in the inability to extinguish an engine fire that, if uncontrollable, could lead to wing failure.

(f) Compliance

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

(g) Revision of Maintenance or Inspection Program

Within 14 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to add airworthiness limitation 28-AWL-FIRE, by incorporating the information specified in figure 1 to paragraph (g) of this AD into the Airworthiness Limitations Section of the Instructions for Continued Airworthiness. The initial compliance time for accomplishing the actions specified in figure 1 to paragraph (g) of this AD is within 45 days after the effective date of this AD.

Figure 1 to paragraph (g) of this AD: *Engine fire handle operational check*

AWL No.	Task	Interval	Applicability	Description
28-AWL-FIRE	ALI	30 days	787-8, -9, and -10 airplanes	<p>Engine Fire Handle Operational Check.</p> <p>Concern: The fire handle design can result in airplanes operating with an engine fire handle that cannot be operated. A latently failed engine fire handle could prevent the fire</p>
				<p>extinguishing agent from being able to be released. In the event of certain engine fires, the potential exists for an engine fire to be uncontrollable.</p> <p>Perform the following engine fire handle checks (unless checked by the flightcrew in a manner approved by the principal operations inspector):</p> <ol style="list-style-type: none"> 1. Press the left engine fire handle solenoid override button, and verify that the handle can be pulled up using normal force. CAUTION: Do not rotate the engine fire handle; inadvertent discharge of the fire extinguishing agent would result. Although not required, pulling the FIRE EXT BOTTLE – ENG L1 and L2 circuit breakers will prevent fire bottle discharge. 2. Stow the handle. 3. Press the right engine fire handle solenoid override button, and verify that the handle can be pulled up using normal force. CAUTION: Do not rotate the engine fire handle; inadvertent discharge of the fire extinguishing agent would result. Although not required, pulling the FIRE EXT BOTTLE – ENG R1 and R2 circuit breakers will prevent fire bottle discharge. 4. Stow the handle. <p>Replace any engine fire handle that fails any operational check before further flight.</p>

(h) No Alternative Actions or Intervals

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

(i) Special Flight Permit

Special flight permits, as described in 14 CFR 21.197 and 21.199, are not allowed.

(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) 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 Commercial Airplanes 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.

(k) Related Information

For more information about this AD, contact Rebel Nichols, Aerospace Engineer, Propulsion Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3556; email: Rebel.Nichols@faa.gov.

(l) Material Incorporated by Reference

None.

Issued in Des Moines, Washington, on January 30, 2019.
Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.