



### 適航指令發布單

## Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2019-06-004	發布日期 Date issued	2019/6/13
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 737-700C, -800, and -900ER series airplanes, certificated in any category, as identified in Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019. and Installation of Supplemental Type Certificate (STC) ST00830SE does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.		
主旨摘要	This AD requires a maintenance records check due to certain main slat track assemblies were manufactured incorrectly and are affected by hydrogen embrittlement.		
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"/> Germany LBA <input type="checkbox"/> EASA <input type="checkbox"/> CAA-NL <input type="checkbox"/> Brazil <input type="checkbox"/> UK CAA <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> Japan CAB <input type="checkbox"/> DGAC <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____		
	設計國 AD 編號 Original AD number	2019-11-03	
	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	ATA 27. Ref. Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 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： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a> 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： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a>			

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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2019-0409; Product Identifier 2019-NM-092-AD; Amendment 39-19649; AD 2019-11-03]**

**RIN 2120-AA64**

#### **Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

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**SUMMARY:** The FAA is adopting an airworthiness directive (AD) for certain The Boeing Company Model 737-700C, -800, and -900ER series airplanes. This AD requires a maintenance records check to determine if any main slat track assembly has been removed, an inspection of the main slat track assemblies for a suspect lot number or a lot number that cannot be determined, and applicable on-condition actions. This AD was prompted by a report that certain main slat track assemblies were manufactured incorrectly and are affected by hydrogen embrittlement. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective June 10, 2019.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of June 10, 2019.

The FAA must receive comments on this AD by July 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.

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>. 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. It is also available on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0409.

### **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-2019-0409; or in person at the Docket Management Facility 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:** Greg Rutar, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3529; email: [Greg.Rutar@faa.gov](mailto:Greg.Rutar@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

The FAA has received a report from Boeing indicating that 148 main slat track assemblies from a set of lot numbers were manufactured incorrectly and are affected by hydrogen embrittlement. Main slat track assemblies that are affected by hydrogen embrittlement have reduced strength. After reviewing information within the report provided from Boeing, the FAA determined on May 22, 2019, that this condition, if not addressed, could result in failure of main slat track assemblies, which could cause the slat to depart and potentially strike the airplane, resulting in injury to airplane occupants and/or preventing continued safe flight and landing.

#### **Other Relevant Potential Rulemaking**

The FAA has determined that the identified unsafe condition also exists on Boeing Model 737-8 and -9 (737 MAX) airplanes. Boeing is currently developing service information that will address the unsafe condition for these airplanes. Once this service information is developed, approved, and available, the FAA might consider additional rulemaking.

#### **Related Service Information Under 1 CFR Part 51**

The FAA reviewed Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019. This service information describes procedures for a maintenance records check to determine if any main slat track assembly has been removed, an inspection of the main slat track assemblies for a suspect lot number or a lot number that cannot be determined, sending the inspection results to Boeing, and applicable on-condition actions. On-condition actions include replacing main slat track assemblies having a suspect lot number, or having a lot number that cannot be determined, with serviceable main slat track assemblies; shipping main slat track assemblies with suspect lot numbers or with lot numbers that cannot be determined to Boeing; and contacting Boeing to report if any main slat track assembly has been removed. 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 the agency 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 accomplishment of the actions identified in Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019, described previously, except for any differences identified as exceptions in the regulatory text of this AD.

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-2019-0409.

## **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 main slat track assemblies that are affected by hydrogen embrittlement have reduced strength. This condition, if not addressed, could result in failure of main slat track assemblies, which could cause the slat to depart and potentially strike the airplane, resulting in injury to airplane occupants and/or preventing continued safe flight and landing. The compliance time for the required action that has been determined to adequately address the unsafe condition is shorter than the time necessary for the public to comment and for publication of the final rule. Therefore, the FAA finds good cause that notice and opportunity for prior public comment are impracticable. In addition, for the reasons stated above, the FAA finds that good cause exists for making this amendment effective in less than 30 days.

## **Regulatory Flexibility Act (RFA)**

The requirements of the RFA do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

## **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-2019-0409 and Product Identifier 2019-NM-092-AD at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. The FAA 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 the agency receives, without change, to <http://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact the agency receives about this final rule.

## **Costs of Compliance**

The FAA estimates that this AD affects 32 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

**Estimated Costs for Required Actions**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Maintenance records check	1 work-hour × \$85 per hour = \$85	\$0	\$85	\$2,720
Inspection	3 work-hours × \$85 per hour = \$255	0	255	8,160
Reporting	1 work-hour × \$85 per hour = \$85	0	85	2,720

The FAA estimates the following costs to do any necessary on-condition 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 on-condition actions:

**Estimated Costs of On-Condition Costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Replacement and shipping	Up to 54 work-hours × \$85 per hour = Up to \$4,590	Up to \$82,680	Up to \$87,270.

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 available known costs in our cost estimate.

**Paperwork Reduction Act**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB control number. The control number for the collection of information required by this AD is 2120-0056. The paperwork cost associated with this AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting associated with this AD is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at 800 Independence Ave. SW, Washington, DC 20591. ATTN: Information Collection Clearance Officer, AES-200.

**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**

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, and
- (2) Will not affect intrastate aviation in Alaska.

### **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):



**2019-11-03 The Boeing Company:** Amendment 39-19649; Docket No. FAA-2019-0409; Product Identifier 2019-NM-092-AD.

**(a) Effective Date**

This AD is effective June 10, 2019.

**(b) Affected ADs**

None.

**(c) Applicability**

(1) This AD applies to The Boeing Company Model 737-700C, -800, and -900ER series airplanes, certificated in any category, as identified in Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019.

(2) Installation of Supplemental Type Certificate (STC) ST00830SE does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE is installed, a “change in product” alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

**(d) Subject**

Air Transport Association (ATA) of America Code 27, Flight Controls.

**(e) Unsafe Condition**

This AD was prompted by a report that certain main slat track assemblies were manufactured incorrectly and are affected by hydrogen embrittlement. The FAA is issuing this AD to address main slat track assemblies that have reduced strength due to hydrogen embrittlement. This condition, if not addressed, could result in failure of main slat track assemblies, which could cause the slat to depart and potentially strike the airplane, resulting in injury to airplane occupants and/or preventing continued safe flight and landing.

**(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 Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 737-27A1312, dated June 4, 2019, which is referred to in Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019.

#### **(h) Exceptions to Service Information Specifications**

(1) For purposes of determining compliance with the requirements of this AD: Where Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019, uses the phrase “the original issue date of Requirements Bulletin 737-27A1312 RB,” this AD requires using “the effective date of this AD.”

(2) Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019, specifies to report inspection results to Boeing within a certain compliance time. For this AD, the compliance time to report inspection results is at the applicable time specified in paragraph (h)(2)(i) or (h)(2)(ii) of this AD.

(i) If the inspection was done on or after the effective date of this AD: Submit the report within 3 days after the inspection.

(ii) If the inspection was done before the effective date of this AD: Submit the report within 3 days after the effective date of this AD.

(3) Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019, specifies to ship affected parts to Boeing within a certain compliance time if, during the inspection, it has been determined that any main slat track assembly has a suspect lot number or has a lot number that cannot be determined. For this AD, the compliance time for shipping affected parts to Boeing is at the applicable time specified in paragraph (h)(3)(i) or (h)(3)(ii) of this AD.

(i) If the inspection was done on or after the effective date of this AD: Ship the affected part to Boeing within 30 days after removing the affected part.

(ii) If the inspection was done before the effective date of this AD: Ship the affected part to Boeing within 30 days after the effective date of this AD.

(4) Where “CONDITION 5” of Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019, uses the phrase “suspect lot number cannot be determined,” or “suspect lot number that cannot be determined,” this AD requires using, “lot number cannot be determined,” or “lot number that cannot be determined;” respectively.

(5) Where flag note (a) of Figure 5, Figure 6, Figure 7, and Figure 8, of Boeing Alert Requirements Bulletin 737-27A1312 RB, dated June 4, 2019, specifies “Only required if the main slat track assembly has a suspect lot number,” this AD requires using, “Only required if the main slat track assembly has a suspect lot number or a lot number that cannot be determined.”

#### **(i) Paperwork Reduction Act Burden Statement**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

## **(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 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.

## **(k) Related Information**

For more information about this AD, contact Greg Rutar, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3529; email: Greg.Rutar@faa.gov.

## **(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 Requirements Bulletin 737-27A1312 RB, dated June 4, 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; telephone 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.