

[Federal Register Volume 81, Number 186 (Monday, September 26, 2016)]  
[Rules and Regulations]  
[Pages 65857-65860]  
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]  
[FR Doc No: 2016-22187]

---

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2016-3992; Directorate Identifier 2015-NM-075-AD; Amendment 39-18653; AD 2016-19-04]**

**RIN 2120-AA64**

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

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

**ACTION:** Final rule.

---

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 787-8 airplanes. This AD was prompted by a report of uncommanded movement by a captain's seat during a landing rollout due to a failure in the seat horizontal actuator. This AD requires repetitive tests of the captain and first officer seat assemblies for proper operation, and corrective action if necessary. This AD also requires installation of new captain and first officer seat assemblies, which terminates the repetitive tests. We are issuing this AD to prevent a seat actuator clutch failure, which could result in a loss of seat locking and uncommanded motion of the captain's or first officer's seat; uncommanded seat movement could result in reduced controllability of the airplane.

**DATES:** This AD is effective October 31, 2016.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of October 31, 2016.

**ADDRESSES:** For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone: 206-544-5000, extension 1; fax: 206-766-5680; Internet: <https://www.myboeingfleet.com>. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3992.

#### **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-2016-3992; 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 AD,

the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, 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:** Brandon Lucero, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6572; fax: 425-917-6590; email: Brandon.Lucero@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We 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 787-8 airplanes. The NPRM published in the Federal Register on March 7, 2016 (81 FR 11687) ("the NPRM"). The NPRM was prompted by a report of uncommanded movement by a captain's seat during a landing rollout due to a failure in the seat horizontal actuator. The NPRM proposed to require repetitive tests of the captain and first officer seat assemblies for proper operation, and corrective action if necessary. The NPRM also proposed to require installation of new captain and first officer seat assemblies, which would terminate the repetitive tests. We are issuing this AD to prevent a seat actuator clutch failure, which could result in a loss of seat locking and uncommanded motion of the captain's or first officer's seat; uncommanded seat movement could result in reduced controllability of the airplane.

### **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

#### **Request To Remove Service Bulletin Issue Number and Date**

Boeing requested that we revise the NPRM to not specify the Service Bulletin issue number and date, or alternatively to include "or subsequent" when referencing Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014.

Boeing commented that the seat supplier is currently working on a related nuisance issue of intermittent electrical operation of the seat-powered adjustment system. Boeing stated that the resolution to this issue may result in changes to the part numbers of the actuators and seat assemblies, and revision to the service bulletin issue number and date.

We do not agree with the commenter's request to remove the issue number and date of the service information. We cannot allow use of "later-approved revisions" in an AD when referring to the service document. Doing so violates Office of the Federal Register (OFR) regulations for approval of materials "incorporated by reference," as specified in 1 CFR 51.1(f). If for any reason the issue and date of the service bulletin should change, the FAA may consider issuing an alternative method of compliance (AMOC) to allow use of a later revision. We have not changed this AD in this regard.

#### **Request To Remove the Replacement Seat Part Numbers**

Boeing requested that we remove the replacement seat part numbers to be installed as terminating action from this AD, and instead specify that seats be replaced with part numbers "as specified in Boeing Alert Service Bulletin B787-81205-SB250054-00."

Boeing commented that the seat supplier is currently working on a related nuisance issue of intermittent electrical operation of the seat-powered adjustment system. The resolution to this issue may result in change to the part numbers of the actuators and seat assemblies.

We partially agree with the commenter's request. We have changed paragraph (h) of this AD to remove the part numbers of the actuators and seat assemblies from this AD and to include the part numbers specified in Boeing Alert Service Bulletin B787-81205-SB250054-00. However, we have included the revision level and date of the service information for the reasons noted in the previous comment response. The FAA may consider issuing an AMOC to allow use of a later revision of the service information.

### **Request To Allow Credit for Prior Accomplishment of Service Bulletins**

United Airlines requested that the AD allow credit for prior accomplishment of Boeing and Ipeco service information.

We already provide credit in paragraph (f) of this AD for prior accomplishment of Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014, if accomplished before the effective date of this AD. In addition, credit is not necessary for using the Ipeco service information referenced in Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014, because this AD does not specifically require using Ipeco service information. No change to this AD is necessary.

### **Conclusion**

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

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

We reviewed Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014. This service information provides procedures for installation of new captain and first officer seat assemblies, a test of the captain and first officer seat assemblies, and corrective action if necessary. 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.

### **Costs of Compliance**

We estimate that this AD affects 18 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
Operational test	2 work-hours × \$85 per hour = \$170 per test cycle	\$0	\$170 per test cycle	\$3,060 per test cycle.
Seat assembly installation	3 work-hours × \$85 per hour = \$255 to replace two seats	\$15,141 per seat × 2 seats = \$30,282	\$30,537 to replace two seats	\$549,666.

We estimate the following costs to do any necessary corrective actions that would be required based on the results of the operational tests. We have 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 of captain seat vertical actuator	2 work-hours × \$85 per hour = \$170	\$7,500	\$7,670
Replacement of captain seat horizontal actuator	2 work-hours × \$85 per hour = \$170	7,500	7,670
Replacement of first officer seat vertical actuator	2 work-hours × \$85 per hour = \$170	7,500	7,670
Replacement of first officer seat horizontal actuator	2 work-hours × \$85 per hour = \$170	7,500	7,670

### 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.

### 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):



---

**2016-19-04 The Boeing Company:** Amendment 39-18653; Docket No. FAA-2016-3992; Directorate Identifier 2015-NM-075-AD.

**(a) Effective Date**

This AD is effective October 31, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to The Boeing Company Model 787-8 airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by a report of uncommanded movement by a captain's seat during a landing rollout due to a failure in the seat horizontal actuator. We are issuing this AD to prevent a seat actuator clutch failure, which could result in a loss of seat locking and uncommanded motion of the captain's or first officer's seat; uncommanded seat motion could result in reduced controllability of the airplane.

**(f) Compliance**

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

**(g) Repetitive Tests of Captain and First Officer Seat Assembly Operation**

Within 1,000 flight hours after the effective date of this AD, test the operation of the captain and first officer seat assemblies and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014. Do all applicable corrective actions before further flight. Repeat the operational test thereafter at intervals not to exceed 1,000 flight hours until the installation required by paragraph (h) of this AD is done.

## **(h) New Seat Installation**

Within 72 months after the effective date of this AD, do the actions specified in paragraphs (h)(1) and (h)(2) of this AD. Installing the seat specified in paragraph (h)(1) or (h)(2) of this AD, as applicable, is terminating action for the repetitive operational tests required by paragraph (g) of this AD for that seat only.

(1) Install a new captain seat assembly, in accordance with paragraph 2.F., "Part 3: Terminating Action: Captain Seat Assembly Replacement," of the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014.

(2) Install a new first officer seat assembly, in accordance with paragraph 2.I., "Part 6: Terminating Action: First Officer Seat Assembly Replacement," of the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB250054-00, Issue 001, dated December 19, 2014.

## **(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office (ACO), 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 ACO, send it to the attention of the person identified in paragraph (j) 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, 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 (i)(4)(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. 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 Brandon Lucero, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6572; fax: 425-917-6590; email: Brandon.Lucero@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 B787-81205-SB250054-00, Issue 001, dated December 19, 2014.

(ii) Reserved.

(3) For The Boeing Company service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone: 206-544-5000, extension 1; fax: 206-766-5680; Internet: <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on September 6, 2016.

Michael Kaszycki,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.