

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2013-0095; Directorate Identifier 2011-NM-197-AD; Amendment 39-17699; AD 2013-25-03]**

**RIN 2120-AA64**

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

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

**ACTION:** Final rule.

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**SUMMARY:** We are superseding Airworthiness Directives (ADs) AD 2000-17-05 and AD 2001-04-09 for all the Boeing Company Model 767 airplanes. AD 2000-17-05 required a functional check of the shear rivets in all six elevator power control actuator (PCA) bellcrank assemblies to determine the condition of the shear rivets; and replacement or rework of the bellcrank assemblies, if necessary. AD 2001-04-09 required repetitive testing of the elevator control system to determine if an elevator PCA is rigged incorrectly due to yielded or failed shear rivets in a bellcrank assembly for the elevator PCA, and follow-on actions if necessary. Since we issued ADs 2000-17-05 and 2001-04-09, a terminating modification has been designed. This new AD requires an inspection to determine the part numbers and condition of the bellcrank assemblies; modification or replacement of the PCA bellcrank assembly, if necessary; and a repetitive functional test and mis-rig check, and corrective actions if necessary. We are issuing this AD to prevent continued operation with yielded or failed shear rivets in the elevator PCA bellcrank assemblies, and to prevent certain failures or jams in the elevator system from causing a hardover of the elevator surface, resulting in a significant pitch upset and possible loss of control of the airplane.

**DATES:** This AD is effective March 3, 2014.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of March 3, 2014.

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of November 28, 2007 (72 FR 67236, November 28, 2007).

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of March 20, 2001 (66 FR 13227, March 5, 2001).

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of September 11, 2000 (65 FR 51754, August 25, 2000).

**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>. You may view this referenced 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.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; 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:** Marie Hogestad, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6418; fax: 425-917-6590; email: [marie.hogestad@faa.gov](mailto:marie.hogestad@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2000-17-05, Amendment 39-11879 (65 FR 51754, August 25, 2000); and AD 2001-04-09, Amendment 39-12128 (66 FR 13227, March 5, 2001). ADs 2000-17-05 and 2001-04-09 applied to the specified products. The NPRM published in the Federal Register on February 26, 2013 (78 FR 12991). The NPRM proposed to continue to require a functional check of the shear rivets in all six PCA bellcrank assemblies to determine the condition of the shear rivets; and replacement or rework of the bellcrank assemblies, if necessary. The NPRM also proposed to continue to require repetitive testing of the elevator control system to determine if an elevator PCA is rigged incorrectly due to failed shear rivets in a bellcrank assembly of the elevator PCA, and follow-on actions if necessary. The NPRM also proposed to require an inspection to determine the part numbers and condition of the bellcrank assemblies; modification or replacement of the PCA bellcrank assembly, if necessary; and a repetitive functional test and mis-rig check, and corrective actions if necessary.

#### **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (78 FR 12991, February 26, 2013) and the FAA's response to each comment.

#### **Request To Withdraw the NPRM (78 FR 12991, February 26, 2013)**

United Airlines (UAL) requested that we withdraw the NPRM (78 FR 12991, February 26, 2013). UAL stated that there may be no benefit to superseding AD 2001-04-09, Amendment 39-12128 (66 FR 13227, March 5, 2001), because current actions provide an equivalent level of safety. UAL stated that, as an alternative method of compliance (AMOC) to AD 2001-04-09, it is presently accomplishing the actions described in the following service bulletins. UAL stated that it is effectively complying with the NPRM, and indicated other airlines may be as well.

- Boeing Service Bulletin 767-27-0186, dated June 25, 2007.
- Boeing Service Bulletin 767-27-0187, dated June 25, 2007.
- Boeing Service Bulletin 767-27-0200, dated June 25, 2007.
- Boeing Service Bulletin 767-27-0201, dated June 27, 2007.
- Boeing Service Bulletin 767-27-0202, Revision 1, dated February 21, 2008.
- Boeing Service Bulletin 767-27-0203, Revision 1, dated February 21, 2008.

We disagree with the commenter's request to withdraw the NPRM (78 FR 12991, February 26, 2013). AD 2000-17-05, Amendment 39-11879 (65 FR 51754, August 25, 2000), and AD 2001-04-09, Amendment 39-12128 (66 FR 13227, March 5, 2001), were considered interim actions. This final rule specifies a terminating modification that will further reduce the probability of the unsafe condition identified in those ADs, which includes installation of solid elevator PCA bellcranks or bellcranks with solid rivets. In addition to this terminating modification, this final rule requires new repetitive testing of the modified system, including repetitive testing of the elevator PCA input rod assemblies (pogo check) and repetitive checks of the elevator PCA rigging.

As UAL indicated, we approved accomplishment of the service information required by this final rule as AMOCs to accomplishing the repetitive testing required by paragraph (a) of AD 2001-04-09, Amendment 39-12128 (66 FR 13227, March 5, 2001). These were global AMOCs; therefore, we have no way of determining the level of airline incorporation. Airlines similar to UAL, which are presently accomplishing the actions described in Boeing Service Bulletins 767-27-0186, 767-27-0187, and 767-27-0200, all dated June 25, 2007; 767-27-0201, dated June 27, 2007; and 767-27-0202 and 767-27-0203, both Revision 1, both dated February 21, 2008; as applicable; as AMOCs to AD 2001-04-09, can take credit for work already accomplished as specified in paragraph (f) of this final rule and are already doing the repetitive actions required by this AD. No change has been made to this final rule in this regard.

### **Request To Allow Credit for Previous Actions**

Boeing requested that we provide credit for the actions required by paragraph (j) of the NPRM (78 FR 12991, February 26, 2013), if those actions were performed before the effective date of this AD using Boeing Service Bulletin 767-27-0186 or 767-27-0187, both dated June 25, 2007, and it is shown that the service information has been incorporated by doing a records check.

We find that clarification is necessary. Paragraph (f) of this AD states to comply with this AD within the compliance times specified, unless already done. For paragraph (j) of this AD, there is no more work required for operators who have already accomplished the actions in Boeing Service Bulletin 767-27-0186 or 767-27-0187, both dated June 25, 2007. No change has been made to this final rule in this regard.

### **Request To Insert a Phrase in Paragraph (k)(1) of the NPRM (78 FR 12991, February 26, 2013)**

ABX Air (ABX) requested that paragraph (k)(1) of the NPRM (78 FR 12991, February 26, 2013) be revised by inserting the phrase, "Unless the function check (pogo check) specified by paragraph (k)(2) of this AD was previously accomplished." ABX stated that paragraph (k)(1) of the NPRM proposed to require accomplishment of the pogo check in accordance with Boeing Service Bulletin 767-27-0186, dated June 25, 2007, before further flight after doing the inspection and applicable corrective actions proposed by paragraph (j) of the NPRM. ABX stated that if the pogo check was accomplished previously in accordance with Boeing Service Bulletin 767-27-0200, dated June 25, 2007, then the pogo check proposed by paragraph (k)(1) of the NPRM is not necessary.

ABX further stated that the pogo check specified in Boeing Service Bulletins 767-27-0186 and 767-27-0200, both dated June 25, 2007, are equivalent, and if each input control rod assembly passed the pogo check inspection, or was overhauled or replaced in accordance with paragraph (k)(2) of the NPRM (78 FR 12991, February 26, 2013), then the repetitive pogo check limit of 12,000 flight hours

will provide protection against input control rod assembly malfunction. ABX stated that requiring accomplishment of the pogo check concurrently with the bellcrank assembly inspection/modification will provide no safety benefit if the inspections specified in paragraph (k)(2) of the NPRM are in place.

We disagree with revising paragraph (k)(1) of this final rule as requested. Boeing Service Bulletins 767-27-0186 and 767-27-0187, both dated June 25, 2007 (referenced in paragraph (j) of this AD), are applicable to line numbers 1 through 901. An equivalent change was made during production for line numbers 902 and subsequent. As ABX stated, Boeing Service Bulletins 767-27-0186 and 767-27-0187, both dated June 25, 2007, include the same testing provided in Boeing Service Bulletins 767-27-0200, dated June 25, 2007; 767-27-0201, dated June 27, 2007; and 767-27-0202 and 767-27-0203, both Revision 1, both dated February 21, 2008.

However, for line numbers 1 through 901, the initial checks (pogo and mis-rig) must be completed following the modification of the system and must be repeated at the repetitive inspection intervals provided in paragraphs (k)(2) and (l)(2) of this AD. Since paragraphs (k)(1) and (l)(1) of this AD are the initial checks for these airplanes, and the intent is to do all of the actions specified in Boeing Service Bulletins 767-27-0186 and 767-27-0187, both dated June 25, 2007, at the time of modification, we disagree with making the requested change. No change has been made to this final rule in this regard.

### **Request To Add Exception to Service Information**

Boeing requested that we add an exception to allow operators to omit Step 5 of Work Packages 1 and 2 of Boeing Service Bulletins 767-27-0186 and 767-27-0187, both dated June 25, 2007. Boeing stated that Step 4 of Work Packages 1 and 2 of Boeing Service Bulletins 767-27-0186 and 767-27-0187, both dated June 25, 2007, states "Install elevator PCA input linkage. Refer to 767 AMM 27-31-06 as an accepted procedure." Boeing stated that AMM 27-31-06 of the Boeing Aircraft Maintenance Manual requires adjustment of the PCA input rods per Task 27-31-00, which adjusts the input rods for each elevator PCA to make sure that the elevator aligns to the index plate. Boeing stated that Step 5 of Work Packages 1 and 2 of Boeing Service Bulletins 767-27-0186 and 767-27-0187, both dated June 25, 2007, states, "Do the elevator PCA Mis-Rig test. Refer to 767 AMM 27-31-00 as an accepted procedure." Boeing stated that the PCA input rod adjustment per AMM 27-31-00 is a precise rigging of the elevator PCA input rods. Boeing stated that a subsequent mis-rig test, which tests for a gross mis-rig of the system, is redundant and has no effect on correcting the unsafe condition.

We agree with adding an exception in this final rule as requested. We re-designated paragraph (n) of the NPRM (78 FR 12991, February 26, 2013) as paragraph (n)(1) of this final rule. We also added new paragraph (n)(2) to this final rule to specify that for airplanes on which an adjustment of the PCA input rods has been done as specified in AMM 27-31-00 of the Boeing 767 Aircraft Maintenance Manual during the accomplishment of Step 3.B.4 of Work Packages 1 and 2 of Boeing Service Bulletins 767-27-0186 and 767-27-0187, both dated June 25, 2007, Step 3.B.5 of Work Packages 1 and 2 of Boeing Service Bulletins 767-27-0186 and 767-27-0187, both dated June 25, 2007, is not required. We have also added a reference to paragraph (n)(2) in paragraph (l)(1) of this final rule.

### **Clarification of NPRM (78 FR 12991, February 26, 2013)**

The preamble of the NPRM (78 FR 12991, February 26, 2013) included a table identifying revised paragraph identifiers. The second line of the table stated that paragraph (b) of AD 2000-17-05, Amendment 39-11879 (65 FR 51754, August 25, 2000), corresponds to paragraph (g)(4) of the NPRM. We did not retain paragraph (b) of AD 2000-17-05; therefore, there is no corresponding paragraph (g)(4) in the NPRM. Since this table is not included in the final rule, no change has been made to this final rule in this regard.

## Additional Change Made to This AD

Certain text in paragraph (h) of the NPRM (78 FR 12991, February 26, 2013) has been redesignated as Note 1 to paragraph (h) in this final rule, since that text is explanatory only.

## 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 (78 FR 12991, February 26, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 12991, February 26, 2013).

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

## Costs of Compliance

We estimate that this AD affects 415 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated Costs					
Action	Labor cost	Parts cost	U.S. Airplanes	Cost per product	Cost on U.S. operators
Functional check of the shear rivets (actions retained from AD 2000-17-05, Amendment 39-11879 ( <a href="#">65 FR 51754</a> , August 25, 2000))	4 work-hours × \$85 per hour = \$340	\$0	330	\$340	\$112,200.
Repetitive inspection of bellcrank assemblies (actions retained from AD 2001-04-09, Amendment 39-12128 ( <a href="#">66 FR 13227</a> , March 5, 2001))	2 work-hours × \$85 per hour = \$170 per inspection cycle	0	335	\$170 per inspection cycle	\$56,950 per inspection cycle.
Inspection of elevator PCA bellcrank assemblies, functional test (pogo check), and elevator mis-rig check (new actions for Model 767 airplanes having line numbers 1-901)	23 work-hours × \$85 per hour = \$1,955	0	390	\$1,955	\$762,450.
Repetitive functional test (pogo check) (new action for all Model 767 airplanes)	32 work-hours × \$85 per hour = \$2,720 per inspection cycle	0	415	\$2,720 per inspection cycle	\$1,128,800 per inspection cycle.
Repetitive elevator mis-rig check (new action for all Model 767 airplanes)	2 work-hours × \$85 per hour = \$170 per inspection cycle	0	415	\$170 per inspection cycle	\$70,550 per inspection cycle.

We estimate the following costs to do any necessary repairs or replacements that will be required based on the results of the inspection, tests, and checks. We have no way of determining the number of aircraft that might need these repairs or replacements.

We estimate that reworking the bellcrank assembly will take about 6 work-hours, for a labor cost of \$510 per airplane; however, we have no definitive data to determine the cost of parts required. We have received no definitive data that would enable us to provide a cost estimate for replacing or overhauling the elevator PCA input rod assembly, adjusting the elevator PCA input rod assemblies, and doing structural inspections specified in this AD.

According to the manufacturer, some of the costs of this AD might be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all 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.

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**

We have 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) 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 removing airworthiness directives (ADs) 2000-17-05, Amendment 39-11879 (65 FR 51754, August 25, 2000); and 2001-04-09, Amendment 39-12128 (66 FR 13227, March 5, 2001); and adding the following new AD:



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**2013-25-03 the Boeing Company:** Amendment 39-17699; Docket No. FAA-2013-0095; Directorate Identifier 2011-NM-197-AD.

**(a) Effective Date**

This AD is effective March 3, 2014.

**(b) Affected ADs**

This AD supersedes AD 2000-17-05, Amendment 39-11879 (65 FR 51754, August 25, 2000); and AD 2001-04-09, Amendment 39-12128 (66 FR 13227, March 5, 2001). This AD affects AD 2007-24-08, Amendment 39-15274 (72 FR 67236, November 28, 2007).

**(c) Applicability**

This AD applies to all the Boeing Company Model 767-200, -300, -300F, and -400ER series airplanes, certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 27, Flight controls.

**(e) Unsafe Condition**

This AD was prompted by reports of failed shear rivets in the bellcrank assemblies of the elevator power control actuator (PCA). We are issuing this AD to prevent continued operation with yielded or failed shear rivets in the elevator PCA bellcrank assemblies, and to prevent certain failures or jams in the elevator system from causing a hardover of the elevator surface, resulting in a significant pitch upset and possible loss of control of the airplane.

**(f) Compliance**

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

**(g) Retained Functional Check**

This paragraph restates the requirements of paragraph (a) of AD 2000-17-05, Amendment 39-11879 (65 FR 51754, August 25, 2000). For Model 767-200, -300, and -300F series airplanes, line numbers 1 through 800 inclusive: Within 30 days after September 11, 2000 (the effective date AD 2000-17-05), perform a functional check of one shear rivet in all six elevator PCA bellcrank assemblies to determine the condition of the shear rivets, in accordance with Paragraph 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000. Doing the actions required by paragraphs (j), (k), and (l) of this AD terminates the requirements of this paragraph, paragraph (g)(2), and paragraph (g)(3) of this AD.



(1) If all penetration depths, when measured per Figure 2 of Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000, are 0.50 inch or more, no further action is required by paragraph (g), including all subparagraphs, of this AD.

(2) If any penetration depth, when measured per Figure 2 of Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000, is 0.35 inch or more, but less than 0.50 inch, rework or replace the bellcrank assembly with a new or serviceable bellcrank assembly within 400 flight hours after accomplishing the functional check. After installation of a new or serviceable bellcrank assembly, and prior to further flight, repeat the functional check of all the bellcrank assemblies to make sure the rivets are still in good condition (as specified in Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000) after installation, in accordance with Figure 2 of Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000.

(3) If any penetration depth, when measured per Figure 2 of Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000, is less than 0.35 inch, prior to further flight, rework or replace the bellcrank assembly with a new or serviceable bellcrank assembly. After installation of a new or serviceable bellcrank assembly, and prior to further flight, repeat the functional check of all the bellcrank assemblies to make sure the rivets are still in good condition (as specified in Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000) after installation, in accordance with Figure 2 of Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000.

#### **(h) Retained Repetitive Tests**

This paragraph restates the requirements of paragraph (a) of AD 2001-04-09, Amendment 39-12128 (66 FR 13227, March 5, 2001), with revised provisions for repetitive tests. For all airplanes: Within 90 days after March 20, 2001 (the effective date of AD 2001-04-09), perform a test of the elevator PCA bellcranks to determine if an elevator PCA is rigged incorrectly due to yielded or failed shear rivets in a bellcrank assembly, in accordance with Boeing Alert Service Bulletin 767-27A0168 (for Model 767-200, -300, and -300F series airplanes); or 767-27A0169 (for Model 767-400ER series airplanes); both dated November 21, 2000. Repeat the test thereafter at least every 400 flight hours. Doing the actions required by paragraphs (j), (k), and (l) of this AD terminates the requirements of this paragraph.

Note 1 to paragraph (h) of this AD: As of March 20, 2001 (the effective date of AD 2001-04-09), and until the accomplishment of the actions required by paragraphs (j), (k), and (l) of this AD, as applicable, accomplishment of the repetitive tests required by paragraph (h) of this AD is acceptable for compliance with the functional check of the elevator system required by a certification maintenance requirement (CMR) that is documented as Item Number 27-31-00-5B in the Boeing 767 Maintenance Planning Document (MPD), which is not incorporated by reference in this AD. After accomplishment of the actions required by paragraphs (j), (k), and (l) of this AD, accomplishment of the repetitive tests required by paragraph (h) of this AD are not acceptable for compliance with the functional check of the elevator system required by a CMR that is documented as Item Number 27-31-00-5B in the Boeing 767 MPD.

#### **(i) Retained Follow-On Actions**

This paragraph restates the requirements of paragraph (b) of AD 2001-04-09, Amendment 39-12128 (66 FR 13227, March 5, 2001). For all airplanes: If an elevator PCA is determined to be rigged incorrectly during any test required by paragraph (h) of this AD, before further flight, do a one-time inspection to measure penetration depth of the shear rivets of all three elevator bellcrank assemblies of the affected elevator surface, in accordance with Boeing Alert Service Bulletin 767-27A0168 (for Model 767-200, -300, and -300F series airplanes); or 767-27A0169 (for Model 767-400ER series airplanes); both dated November 21, 2000. Doing the actions required by paragraphs (j), (k), and (l)

of this AD terminates the requirements of this paragraph, paragraph (i)(1), and paragraph (i)(2) of this AD.

(1) If the measured penetration depth of the shear rivets on all bellcrank assemblies is 0.50 inch or more: Before further flight, re-rig the elevator PCA correctly, in accordance with Boeing Alert Service Bulletin 767-27A0168 (for Model 767-200, -300, and -300F series airplanes; or 767-27A0169 (for Model 767-400ER series airplanes); both dated November 21, 2000.

(2) If the measured shear rivet penetration depth on any single bellcrank assembly is less than 0.50 inch: Before further flight, repair the bellcrank assembly by replacing the shear rivets or replace the bellcrank assembly, and reassemble and re-rig the elevator control system, in accordance with Boeing Alert Service Bulletin 767-27A0168 (for Model 767-200, -300, and -300F series airplanes); or 767-27A0169 (for Model 767-400ER series airplanes); both dated November 21, 2000.

#### **(j) New Inspection and Modification**

For airplanes having line numbers 1 through 901 inclusive: Within 72 months after the effective date of this AD, do a general visual inspection of the three PCA bellcrank assemblies on each elevator to determine the part numbers (P/Ns) of the bellcrank assemblies and to determine whether the bellcrank assembly has shear rivets, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 767-27-0186, dated June 25, 2007 (for Model 767-200, -300, and -300F series airplanes); or 767-27-0187, dated June 25, 2007 (for Model 767-400ER series airplanes).

(1) If the bellcrank assembly has P/N 252T2118-4 or 252T2118-5, and has solid rivets, no further action is required by this paragraph.

(2) If the bellcrank is a solid one-piece bellcrank with no rivets, no further action is required by this paragraph.

(3) If the bellcrank assembly has P/N 252T2118-1, 252T2118-2, or 252T2118-3, and has shear rivets, before further flight, do the action specified in either paragraph (j)(3)(i) or (j)(3)(ii) of this AD, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 767-27-0186, dated June 25, 2007 (for Model 767-200, -300, and -300F series airplanes); or 767-27-0187, dated June 25, 2007 (for Model 767-400ER series airplanes); except as provided by paragraph (n) of this AD.

(i) Rework the existing bellcrank to replace the shear rivets with solid rivets.

(ii) Install a new, solid one-piece (no rivets) bellcrank assembly having P/N 252T2118-6.

#### **(k) New Repetitive Functional Test (Pogo Check)**

(1) For airplanes having line numbers 1 through 901 inclusive: Before further flight after doing the inspection and applicable corrective actions required by paragraph (j) of this AD, do a functional test (pogo check) on each of the six elevator PCA input rod assemblies, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 767-27-0186, dated June 25, 2007 (for Model 767-200, -300, and -300F series airplanes); or 767-27-0187, dated June 25, 2007 (for Model 767-400ER series airplanes).

(2) For all airplanes: At the latest of the times specified in paragraphs (k)(2)(i), (k)(2)(ii), and (k)(2)(iii) of this AD, do a functional test (pogo check) on each of the six elevator PCA input rod assemblies, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 767-27-0200, dated June 25, 2007 (for Model 767-200, -300, and -300F series airplanes); or 767-27-0201, dated June 27, 2007 (for Model 767-400ER series airplanes). Repeat the pogo check thereafter at intervals not to exceed 12,000 flight hours.

(i) Before the accumulation of 12,000 total flight hours.

(ii) Within 12,000 flight hours after completion of the most recent pogo check.

(iii) Within 6,000 flight hours after the effective date of this AD.

(3) If any elevator PCA input rod assembly fails to meet any functional test requirement of this AD, before further flight, replace the elevator PCA input rod assembly with a new or serviceable assembly, or overhaul the elevator PCA input rod assembly, in accordance with the applicable service

information identified in paragraphs (k)(3)(i) and (k)(3)(ii) of this AD, except as provided by paragraph (n) of this AD.

(i) For replacing or overhauling the assembly on Model 767-200, -300, and -300F airplanes: Use Boeing Service Bulletin 767-27-0186, dated June 25, 2007; or 767-27-0200, dated June 25, 2007; as applicable.

(ii) For replacing or overhauling the assembly on Model 767-400ER airplanes: Use Boeing Service Bulletin 767-27-0187, dated June 25, 2007; or 767-27-0201, dated June 27, 2007; as applicable.

#### **(l) New Elevator PCA Check (Mis-rig Check)**

(1) Except as provided by paragraph (n)(2) of this AD, for airplanes having line numbers 1 through 901 inclusive: Before further flight after doing the actions required by paragraphs (j) and (k) of this AD, do a check of the elevator PCA rigging, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 767-27-0186, dated June 25, 2007 (for Model 767-200, -300, and -300F series airplanes); or 767-27-0187, dated June 25, 2007 (for Model 767-400ER series airplanes).

(2) For all airplanes: At the latest of the times specified in paragraphs (l)(2)(i), (l)(2)(ii), and (l)(2)(iii) of this AD, do a check of the elevator PCA rigging, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 767-27-0202, Revision 1, dated February 21, 2008 (for Model 767-200, -300, and -300F series airplanes); or 767-27-0203, Revision 1, dated February 21, 2008 (for Model 767-400ER series airplanes). Repeat the mis-rig check thereafter at intervals not to exceed 6,000 flight hours.

(i) Before the accumulation 6,000 total flight hours.

(ii) Within 6,000 flight hours after the completion of the most recent mis-rig check, or after completion of the most recent bellcrank repetitive check, as specified in Boeing Alert Service Bulletin 767-27A0168, dated November 20, 2000.

(iii) Within 6,000 flight hours after the effective date of this AD.

(3) If a mis-rig condition is found, before further flight, adjust the PCA input rod assemblies and do a structural inspection for damage, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 767-27-0202, Revision 1, dated February 21, 2008 (for Model 767-200, -300, and -300F airplanes); or 767-27-0203, Revision 1, dated February 21, 2008 (for Model 767-400ER airplanes). If any damage is found during any structural inspection, before further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

#### **(m) Terminating Action**

Accomplishment of the requirements of paragraphs (j), (k), and (l) of this AD terminates the requirements of paragraphs (g), (h), and (i) of this AD.

#### **(n) Service Bulletin Exceptions**

(1) Where Boeing Service Bulletins 767-27-0186 and 767-27-0187, both dated June 25, 2007, specify the use of grease BMS 3-24, this AD allows the alternate use of grease BMS 3-33.

(2) For airplanes on which an adjustment of the PCA input rods has been done as specified in Boeing 767 AMM 27-31-00 during the accomplishment of Step 3.B.4 of Work Packages 1 and 2 of Boeing Service Bulletins 767-27-0186 and 767-27-0187, both dated June 25, 2007: Accomplishment of the actions specified in Step 3.B.5 of Work Package 1 and 2 of Boeing Service Bulletins 767-27-0186 and 767-27-0187, both dated June 25, 2007, is not required by this AD.

**(o) Method of Compliance for Paragraph (k) of AD 2007-24-08, Amendment 39-15274 (72 FR 67236, November 28, 2007)**

For airplanes identified in paragraphs (o)(1) and (o)(2) of this AD: Doing the actions required by paragraphs (j), (k), and (l) of this AD is acceptable for compliance with the actions required by paragraph (k) of AD 2007-24-08, Amendment 39-15274 (72 FR 67236, November 28, 2007).

(1) Group 1, Configuration 2, airplanes identified in Boeing Special Attention Service Bulletin 767-27-0197, Revision 1, dated July 19, 2007.

(2) Group 1, Configuration 1, airplanes identified in Boeing Special Attention Service Bulletin 767-27-0198, Revision 1, dated July 19, 2007.

**(p) Parts Installation Prohibition**

As of the effective date of this AD, no person may install a bellcrank assembly, P/N 252T2118-1, 252T2118-2, or 252T2118-3, on any airplane.

**(q) Credit for Previous Actions**

This paragraph provides credit for the actions required by paragraph (l) of this AD, if those actions were performed before the effective date of this AD using Boeing Service Bulletin 767-27-0202 (for Model 767-200, -300, and -300F airplanes); or 767-27-0203 (for Model 767-400ER airplanes); both dated June 25, 2007, which are not incorporated by reference in this AD.

**(r) 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 (s) 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 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. For a repair method to be approved, the repair must meet the certification basis of the airplane and the approval must specifically refer to this AD.

(4) AMOCs approved previously for AD 2001-04-09, Amendment 39-12128 (66 FR 13227, March 5, 2001), are approved as AMOCs for the corresponding requirements of this AD.

**(s) Related Information**

(1) For more information about this AD, contact Marie Hogestad, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6418; fax: (425) 917-6590; email: marie.hogestad@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference in this AD may be obtained at the addresses specified in paragraphs (t)(7) and (t)(8) of this AD.

**(t) 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.

(3) The following service information was approved for IBR on March 3, 2014.

(i) Boeing Service Bulletin 767-27-0186, dated June 25, 2007.

(ii) Boeing Service Bulletin 767-27-0187, dated June 25, 2007.

(iii) Boeing Service Bulletin 767-27-0200, dated June 25, 2007.

(iv) Boeing Service Bulletin 767-27-0201, dated June 27, 2007.

(v) Boeing Service Bulletin 767-27-0202, Revision 1, dated February 21, 2008.

(vi) Boeing Service Bulletin 767-27-0203, Revision 1, dated February 21, 2008.

(4) The following service information was approved for IBR on November 28, 2007 (72 FR 67236, November 28, 2007).

(i) Boeing Special Attention Service Bulletin 767-27-0197, Revision 1, dated July 19, 2007.

(ii) Boeing Special Attention Service Bulletin 767-27-0198, Revision 1, dated July 19, 2007.

(5) The following service information was approved for IBR on March 20, 2001 (66 FR 13227, March 5, 2001).

(i) Boeing Alert Service Bulletin 767-27A0168, dated November 21, 2000.

(ii) Boeing Alert Service Bulletin 767-27A0169, dated November 21, 2000.

(6) The following service information was approved for IBR on September 11, 2000 (65 FR 51754, August 25, 2000).

(i) Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000.

(ii) Reserved.

(7) 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>.

(8) You may view this service information at 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.

(9) 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 December 4, 2013.

John P. Piccola,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.