



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0905; Product Identifier 2017-NM-090-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2013-01-02, which applies to certain The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes; and Model 757-200, -200PF, and -300 series airplanes. AD 2013-01-02 requires replacing the control switches of certain cargo doors. Since we issued AD 2013-01-02, additional un-commanded cargo door operation has been reported. This proposed AD would require replacement of certain cargo door control switches with a new improved switch; installation of an arm switch in certain cargo doors; operational and functional tests; and applicable on-condition actions. This proposed AD would also add airplanes to the applicability. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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 NPRM, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster 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, 1601 Lind Avenue SW., Renton, WA. 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-2017-0905.

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-2017-0905; 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 NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Caspar Wang, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6414; fax: 425-917-6590; email: caspar.wang@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2017-0905; Product Identifier 2017-NM-090-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM 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 proposed AD.

Discussion

On January 4, 2013, we issued AD 2013-01-02, Amendment 39-17316 (78 FR 4051, January 18, 2013) (“AD 2013-01-02”), for certain The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes; and Model 757-200, -200PF, and -300 series airplanes. AD 2013-01-02 requires replacing the control switches of the forward, aft, and nose cargo doors of Model 747 airplanes; and replacing the control switches of cargo doors 1 and 2 of Model 757 series airplanes. AD 2013-01-02 resulted from reports of problems associated with the uncommanded

operation of cargo doors. We issued AD 2013-01-02 to prevent injuries to persons and damage to the airplane.

Actions Since AD 2013-01-02 Was Issued

Since we issued AD 2013-01-02, additional un-commanded cargo door operation has been reported. In the most recent report the switch had only been installed for 44 months. Testing of failed switches found that the cargo door control switch can remain actuated after released to the OFF position. We have determined that the replacements required by AD 2013-01-02 do not adequately address the identified unsafe condition and that new improved switches must be installed. With a new cargo door control and arm switch configuration installed, the operator must manually move both switches to operate the cargo door. Both switches are spring loaded to the off position and releasing either switch will stop the door operation.

We have also determined that certain Model 757-200CB series airplanes and Model 747-8F and 747-8 series airplanes are affected by the identified unsafe condition and must be included in this proposed AD.

Related Service Information under 1 CFR part 51

We reviewed the following Boeing service information.

- Boeing Service Bulletin 747-52-2307, dated May 23, 2017, and Boeing Service Bulletin 747-52-2308, dated June 5, 2017. This service information describes procedures for replacement of the nose, forward, and aft cargo door control switches with new improved switches, installation of an arm switch in the forward and aft cargo doors, a nose cargo door normal operational test, forward and aft cargo door open and close functional tests, and applicable on-condition actions. These documents are distinct since they apply to different airplane models in different configurations.
- Boeing Service Bulletin 757-52-0093, Revision 1, dated April 21, 2017. This service information describes procedures for replacement of the forward and aft cargo

door control switches with new improved switches, installation of an arm switch in the forward and aft cargo doors, an operational test of the No. 1 and No. 2 cargo doors, repetitive functional tests of the No. 1 and No. 2 cargo doors, and applicable on-condition actions.

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

We are proposing 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 these same type designs.

Proposed AD Requirements

This proposed AD would retain none of the requirements of AD 2013-01-02. This proposed AD would require accomplishing the actions identified as "RC" (required for compliance) in the Accomplishment Instructions of Boeing Service Bulletin 747-52-2307, dated May 23, 2017; Boeing Service Bulletin 747-52-2308, dated June 5, 2017; and Boeing Service Bulletin 757-52-0093, Revision 1, dated April 21, 2017; as applicable; except for any differences identified as exceptions in the regulatory text of this proposed AD. This proposed AD also would add airplanes to the applicability.

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-2017-0905.

Differences Between this Proposed AD and the Service Information

The effectivity of Boeing Service Bulletin 757-52-0093, Revision 1, dated April 21, 2017, is limited to Model 757-200, -200CB, -200PF, and -300 series airplanes, line numbers 1 through 1050. However, the applicability of this proposed AD includes

four additional Model 757 airplanes, variable numbers NP901 through NP904 inclusive. We have included this difference because of new findings related to these additional airplanes indicating they are subject to the identified unsafe condition. This difference has been coordinated with Boeing. Additionally, Boeing has indicated that Boeing Service Bulletin 757-52-0093, Revision 1, dated April 21, 2017, will be revised to include the additional airplanes. We will consider including the revised service information, if available, in the final rule.

Costs of Compliance

We estimate that this proposed AD affects 584 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement (Boeing Service Bulletin 747-52-2307) (14 airplanes)	78 work-hours X \$85 per hour = \$6,630	\$12,874	\$19,504	\$273,056
Replacement (Boeing Service Bulletin 747-52-2308) (94 airplanes)	24 work-hours X \$85 per hour = \$2,040	\$980	\$3,020	\$283,880
Replacement (Boeing Service Bulletin 757-52-0093) (476 airplanes)	51 work-hours X \$85 per hour = \$4,335	\$10,626	\$14,961	\$7,121,436
Repetitive Test (Boeing Service Bulletin 757-52-0093) (476 airplanes)	3 work-hours X \$85 per hour = \$255 per test cycle	\$0	\$255 per test cycle	\$121,380 per test cycle

According to the manufacturer, some of the costs of this proposed AD may 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 available 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.

This proposed 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 to the Director of the System Oversight Division.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the 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.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2013-01-02, Amendment 39-17316 (78 FR 4051, January 18, 2013), and adding the following new AD:

The Boeing Company: Docket No. FAA-2017-0905; Product Identifier 2017-NM-090-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2013-01-02, Amendment 39-17316 (78 FR 4051, January 18, 2013) (“AD 2013-01-02”).

(c) Applicability

This AD applies to The Boeing Company airplanes; certificated in any category; as identified in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this AD.

(1) Model 747-8F and 747-8 series airplanes as identified in Boeing Service Bulletin 747-52-2307, dated May 23, 2017.

(2) Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes as identified in Boeing Service Bulletin 747-52-2308, dated June 5, 2017.

(3) Model 757-200, -200PF, -200CB, and -300 series airplanes as identified in Boeing Service Bulletin 757-52-0093, Revision 1, dated April 21, 2017.

(4) Model 757-200, -200PF, -200CB, and -300 series airplanes, variable numbers NP901 through NP904 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 52, Doors.

(e) Unsafe Condition

This AD was prompted by reports of un-commanded cargo door operation. We are issuing this AD to prevent failures of the cargo door control switch from allowing un-commanded movement of the cargo door, which if not corrected, could lead to injuries to persons and damage to the airplane.

(f) Compliance

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

(g) Required Actions

Except as required by paragraph (h) of this AD: Do the applicable actions specified in paragraphs (g)(1), (g)(2), (g)(3), and (g)(4) of this AD.

(1) For airplanes identified in Boeing Service Bulletin 747-52-2307, dated May 23, 2017: At the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 747-52-2307, dated May 23, 2017, do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Service Bulletin 747-52-2307, dated May 23, 2017.

(2) For airplanes identified in Boeing Service Bulletin 747-52-2308, dated June 5, 2017: At the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 747-52-2308, dated June 5, 2017, do all applicable actions identified as RC in, and in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-52-2308, dated June 5, 2017.

(3) For airplanes identified in Boeing Service Bulletin 757-52-0093, Revision 1, dated April 21, 2017: At the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 757-52-0093, Revision 1, dated April 21, 2017, do all applicable actions identified as RC in, and in accordance with, the Accomplishment Instructions of Boeing Service Bulletin 757-52-0093, Revision 1, dated April 21, 2017.

(4) For airplanes identified in paragraph (c)(4) of this AD: Within 24 months after the effective date of this AD, replace the nose, forward, and aft cargo door control switches, as applicable, with new improved switches, install an arm switch in the forward and aft cargo doors, do operational and functional tests, and do applicable on-condition actions, in accordance with a method approved by the Manager, Seattle ACO Branch, FAA.

(h) Exceptions to Service Information

Where Boeing Service Bulletin 747-52-2307, dated May 23, 2017; Boeing Service Bulletin 747-52-2308, dated June 5, 2017; and Boeing Service Bulletin 757-52-0093, Revision 1, dated April 21, 2017; specify a compliance time after “the original

issue date of this service bulletin,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(i) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (g)(3) of this AD, if those actions were performed before the effective date of this AD using Boeing Service Bulletin 757-52-0093, dated May 5, 2016.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, 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 RC, the provisions of paragraphs (j)(4)(i) and (j)(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. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(k) Related Information

(1) For more information about this AD, contact Caspar Wang, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6414; fax: 425-917-6590; email: caspar.wang@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone: 562-797-1717; Internet: <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on September 27, 2017.

Dionne Palermo,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

[FR Doc. 2017-21366 Filed: 10/5/2017 8:45 am; Publication Date: 10/6/2017]