DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2017-15-01, which applied to certain The Boeing Company Model 777 airplanes. AD 2017-15-01 required replacing the existing mode control panel (MCP) with a new MCP having a different part number. This AD retains the requirements of AD 2017-15-01, expands the applicability to include certain other airplanes, and adds a new requirement for certain airplanes to identify and replace the affected parts. This AD was prompted by a determination that the affected parts may be installed on airplanes outside of the original applicability of AD 2017-15-01. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of August 25, 2017 (82 FR 33782, July 21, 2017).
**ADDRESSES:** For service information identified in this final rule, 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 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 https://www.regulations.gov by searching for and locating Docket No. FAA-2019-0974.

**Examining the AD Docket**

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2019-0974; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations is 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:** Frank Carreras, Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3539; email: frank.carreras@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2017-15-01, Amendment 39-18961 (82 FR 33782, July 21, 2017)
AD 2017-15-01 applied to certain The Boeing Company Model 777 airplanes. The NPRM published in the Federal Register on December 13, 2019 (84 FR 68060). The NPRM was prompted by a determination that the affected parts may be installed on airplanes outside of the original applicability of AD 2017-15-01. The NPRM proposed to retain the requirements of AD 2017-15-01, expand the applicability to include those other airplanes, and add a new requirement for certain airplanes to identify and replace the affected parts. The FAA is issuing this AD to address uncommanded changes to the MCP selected altitude; such uncommanded changes could result in incorrect spatial separation between airplanes, midair collision, or controlled flight into terrain.

Comments
The FAA gave the public the opportunity to participate in developing this AD. The FAA has considered the comments received. The Air Line Pilots Association, International (ALPA) and Boeing indicated their support for the NPRM. United Airlines and FedEx had no objection to the NPRM.

Conclusion
The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD as proposed, except for minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.
Related Service Information under 1 CFR Part 51

This AD requires Boeing Special Attention Service Bulletin 777-22-0034, dated March 3, 2016, which the Director of the Federal Register approved for incorporation by reference as of August 25, 2017 (82 FR 33782, July 21, 2017). 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

The FAA estimates that this AD affects 231 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement (retained actions from AD 2017-15-01)</td>
<td>2 work-hours X $85 per hour = $170</td>
<td>Up to $5,800*</td>
<td>Up to $5,970*</td>
<td>Up to $1,379,070*</td>
</tr>
<tr>
<td>Inspection/records check (new proposed action) (up to 28 airplanes)</td>
<td>1 work-hour X $85 per hour = $85</td>
<td>$0</td>
<td>$85</td>
<td>Up to $2,380</td>
</tr>
</tbody>
</table>

*Since the FAA has received no definitive data regarding the cost of a new MCP, the FAA has provided costs for the upgrade (modified part) only.

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.

**Regulatory Findings**

The FAA has 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) Will not affect intrastate aviation in Alaska, and

(3) 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 Directive (AD) 2017-15-01, Amendment 39-18961 (82 FR 33782, July 21, 2017), and adding the following new AD:


   (a) **Effective Date**

   This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

   (b) **Affected ADs**


   (c) **Applicability**

   This AD applies to all The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes, certificated in any category.

   (d) **Subject**

   Air Transport Association (ATA) of America Code 22, Auto flight.

   (e) **Unsafe Condition**

   This AD was prompted by reports of uncommanded altitude display changes in the mode control panel (MCP) altitude window. The FAA is issuing this AD to address
uncommanded changes to the MCP selected altitude; such uncommanded changes could
result in incorrect spatial separation between airplanes, midair collision, or controlled
flight into terrain.

(f) Compliance

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

(g) New Definitions

(1) For the purposes of this AD, an affected part is an MCP having part number

(2) For the purposes of this AD, later-approved parts are only those parts that are
approved as a replacement for the applicable part identified in Boeing Special Attention
Service Bulletin 777-22-0034, dated March 3, 2016; and are approved as part of the type
design by the FAA or The Boeing Company Organization Designation Authorization
(ODA) after March 3, 2016 (the publication date of Boeing Special Attention Service

(h) Retained Replacement of MCP with Revised Compliance Language

This paragraph restates the requirements of AD 2017-15-01, with revised
compliance language. For airplanes identified in Boeing Special Attention Service
effective date of AD 2017-15-01): Do the actions specified in paragraph (h)(1) or (2) of
this AD.

(1) Replace the existing MCP part with an MCP having part number
S241W001-262, in accordance with the Accomplishment Instructions of Boeing Special
(2) Install a later-approved part as defined in paragraph (g)(2) of this AD.

(i) New MCP Identification and Replacement

For airplanes not identified in paragraph (h) of this AD with an original airworthiness certificate or original export certificate of airworthiness issued on or before the effective date of this AD, do the actions specified in paragraphs (i)(1) and (2) of this AD.

(1) Within 60 months after the effective date of this AD, perform a general visual inspection of the MCP to determine the MCP part number. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the MCP can be conclusively determined from that review.

(2) If the MCP is an affected part, within 60 months after the effective date of this AD: Do the actions specified in paragraph (i)(2)(i) or (ii) of this AD.

(i) Replace the existing MCP with an MCP having part number S241W001-262, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-22-0034, dated March 3, 2016.

(ii) Install a later-approved part as defined in paragraph (g)(2) of this AD.

(j) Parts Installation Prohibition

As of the effective date of this AD, no person may install an MCP having part number S241W001-201, S241W001-202, S241W001-251, S241W001-252, or S241W001-261, on any airplane.

(k) 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 (l) 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 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.

(4) AMOCs approved previously for AD 2017-15-01 are approved as AMOCs for the corresponding provisions of this AD.

(5) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (k)(5)(i) and (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.

(l) Related Information

For more information about this AD, contact Frank Carreras, Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3539; email: frank.carreras@faa.gov.

(m) 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 this AD specifies otherwise.

(3) The following service information was approved for IBR on August 25, 2017 (82 FR 33782, July 21, 2017).


(ii) [Reserved]

(4) For service information identified in this AD, 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.
(5) 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.

(6) 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, email fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.


Gaetano A. Sciortino, Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft Certification Service.
[FR Doc. 2020-05362 Filed: 3/16/2020 8:45 am; Publication Date: 3/17/2020]