Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain The Boeing Company Model 737-700 series airplanes. This AD requires repetitive testing to verify correct operation of the smoke clearance mode of the equipment cooling system and low pressure environmental control system, and corrective actions if necessary. This AD also requires installing new relays and changing the wiring to the environmental control system, among other actions. This AD was prompted by a determination that a repetitive test is needed to assess the components on airplanes equipped with a certain air distribution system configuration. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this 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 https://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 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, Airworthiness Products Section, Operational Safety 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-2020-1109.

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-2020-1109; 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, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.
FOR FURTHER INFORMATION CONTACT: Susan L. Monroe, Aerospace
Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch,
2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3570; email:
susan.l.monroe@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA has determined that a repetitive test is needed to assess the components on airplanes equipped with a certain air distribution system configuration. A review by Boeing found that there was no maintenance procedure available to assess the components used to reconfigure the air distribution system to the cargo fire mode. Without the repetitive test, failures of components could be latent for extended periods. This condition, if not addressed, could result in latent failures of the equipment cooling system and low pressure environmental control system, which, in combination with a cargo fire event, could result in smoke in the flight deck and/or main cabin, and possible loss of aircraft control.

Other Related Rulemaking

The FAA issued AD 2016-04-06, Amendment 39-18400 (81 FR 9756, February 26, 2016) (AD 2016-04-06), applicable to all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. That AD requires doing repetitive testing to verify correct operation of the equipment cooling system and low pressure environmental control system, and corrective actions if necessary. That AD also requires, for certain airplanes, installing new relays and changing the wiring to the environmental control system. That AD was prompted by a determination that a repetitive test is needed to inspect the components on airplanes equipped with a certain air distribution system configuration. The actions required by that AD are intended to address latent failures of the equipment cooling system and low pressure environmental control system, which, in
combination with a cargo fire event, could result in smoke in the flight deck and/or main cabin, and possible loss of aircraft control.

Since issuance of that AD, the FAA has determined that additional actions are necessary to address the same unsafe condition identified in AD 2016-04-06 for The Boeing Company Model 737-700 series airplanes having line numbers (L/Ns) 481, 545, 684, 979, 1089, 1211, and 1223. Those actions have been included in the revised service information specified in paragraphs (g) and (h) of this AD. This AD adds the requirements of paragraph (h) that include installing new relays and changing the wiring to the environmental control system, and accomplishing certain concurrent actions, for the affected airplanes.

**Relationship Between This AD and AD 2016-04-06**

This AD does not supersede AD 2016-04-06. Rather, the FAA has determined that a stand-alone AD would be more appropriate to address the requirements of this AD. AD 2016-04-06 did not address the unsafe condition for the 7 airplanes mentioned previously and identified in paragraph (c) of this AD. To address the unsafe condition for these 7 airplanes, this AD requires repetitive testing to verify correct operation of the smoke clearance mode of the equipment cooling system and low pressure environmental control system, and corrective actions if necessary; and also requires installing new relays and changing the wiring to the environmental control system, and accomplishing certain concurrent actions. As such, this AD terminates all of the requirements of AD 2016-04-06 for the airplanes identified in paragraph (c) of this AD only.

**Related Service Information under 1 CFR part 51**

The FAA reviewed the following service information:

Boeing Alert Service Bulletin 737-26A1122, Revision 3, dated January 31, 2020. This service information describes procedures for installing new relays and changing the wiring to the environmental control system.

This service information describes procedures for repetitive testing to verify correct operation of the smoke clearance mode of the equipment cooling system and low pressure environmental control system, and applicable corrective 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**

The FAA is issuing this AD because the agency evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

**AD Requirements**

This AD requires accomplishing the actions specified in the service information described previously.

**FAA’s Justification and Determination of the Effective Date**

There are currently no domestic operators of these products. Therefore, the FAA finds that notice and opportunity for prior public comment are unnecessary and that good cause exists for making this amendment effective in less than 30 days.

**Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, the FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include Docket No. FAA-2020-1109 and Product Identifier 2020-NM-067-AD at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic,
environmental, and energy aspects of this final rule. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, as well as a report summarizing each substantive public contact with FAA personnel concerning this AD. The FAA will consider all comments received by the closing date for comments. The FAA may amend this AD because of those comments.

**Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3570; email: susan.l.monroe@faa.gov. Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

**Regulatory Flexibility Act (RFA)**

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

**Costs of Compliance**

Currently, there are no affected U.S.-registered airplanes. For any affected airplane that is imported and placed on the U.S. Register in the future, the FAA provides the following cost estimates to comply with this AD:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Test</td>
<td>4 work-hours X $85 per hour = $340 per test cycle</td>
<td>$0</td>
<td>$340 per test cycle</td>
</tr>
<tr>
<td>New relays/wiring changes</td>
<td>104 work hours X $85 per hour = $8,840</td>
<td>$11,417</td>
<td>$20,257</td>
</tr>
</tbody>
</table>

We estimate the following costs to do any necessary system fault isolation and replacements that would be required based on the results of the operational test. We have no way of determining the number of aircraft that might need these actions:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform system fault isolation and replace faulty component</td>
<td>10 work-hours X $85 per hour = $850</td>
<td>$0</td>
<td>$850</td>
</tr>
</tbody>
</table>

**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**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866, and
2. Will not affect intrastate aviation in Alaska.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment**

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

**PART 39 - AIRWORTHINESS DIRECTIVES**

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

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

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2021-01-07 The Boeing Company:** Amendment 39-21383; Docket No. FAA-2020-1109; Product Identifier 2020-NM-067-AD.
(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD affects AD 2016-04-06, Amendment 39-18400 (81 FR 9756, February 26, 2016) (“AD 2016-04-06”).

(c) Applicability

This AD applies to The Boeing Company Model 737-700 airplanes, certificated in any category, having line numbers (L/Ns) 481, 545, 684, 979, 1089, 1211, and 1223.

(d) Subject

Air Transport Association (ATA) of America Code 2120, Air Distribution System.

(e) Unsafe Condition

This AD was prompted by a determination that a repetitive test is needed to assess the components on airplanes equipped with a certain air distribution system configuration. The FAA is issuing this AD to address latent failures of the equipment cooling system and low pressure environmental control system, which, in combination with a cargo fire event, could result in smoke in the flight deck and/or main cabin, and possible loss of aircraft control.

(f) Compliance

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

(g) Repetitive Operational Tests and Corrective Actions

At the applicable times identified in paragraph 1.E., “Compliance” of Boeing Alert Service Bulletin 737-26A1137, Revision 2, dated January 27, 2020, except as required by paragraph (i) of this AD, do the test to verify correct operation of the smoke clearance mode of the equipment cooling system and low pressure environmental control system, and do all applicable corrective actions, in accordance with the Accomplishment
Instructions of Boeing Alert Service Bulletin 737-26A1137, Revision 2, dated January 27, 2020. Do all applicable corrective actions before further flight. Repeat the test thereafter at intervals not to exceed 9,000 flight hours.

(h) Concurrent Requirements

Before or concurrently with accomplishing the initial operational test required by paragraph (g) of this AD, install new relays and change the wiring to the environmental control system, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-26A1122, Revision 3, dated January 31, 2020. When the actions required by this paragraph are performed, the installation and changes specified in paragraph 1.B. “Concurrent Requirements” of Boeing Alert Service Bulletin 737-26A1122, Revision 3, dated January 31, 2020, must also be done.

(i) Exceptions to Service Information Specifications

Where Boeing Alert Service Bulletin 737-26A1137, Revision 2, dated January 27, 2020, uses the phrase “the R02 issue date of SB 737-26A1137,” this AD requires using “the effective date of this AD.”

(j) Terminating Action for AD 2016-04-06

As of the effective date of this AD, for the airplanes identified in paragraph (c) of this AD only, the requirements of AD 2016-04-06 are terminated.

(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 Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (k)(4)(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 Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3570; email: susan.l.monroe@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 the AD specifies otherwise.


(3) 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.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on December 30, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-01823 Filed: 2/19/2021 8:45 am; Publication Date: 2/22/2021]