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 adopting a new airworthiness directive (AD) for all The Boeing Company Model 757 airplanes and Model 767-200, -300, and -300F series airplanes. This AD was prompted by reports of excessively high flight deck or cabin temperatures. This AD requires revising certificate limitations and operating procedures of the existing airplane flight manual (AFM), to provide the flightcrew with procedures for hot flight deck or cabin temperatures to follow under certain conditions. 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].

ADDRESSES:

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-2019-0605; 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 (phone: 800-647-5527) 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: 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 issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all The Boeing Company Model 757 airplanes and Model 767-200, -300, and -300F series airplanes. The NPRM published in the Federal Register on August 20, 2019 (84 FR 43080). The NPRM was prompted by reports of excessively high flight deck or cabin temperatures. The NPRM proposed to require revising certificate limitations and operating procedures of the existing AFM to provide the flightcrew with procedures for hot flight deck or cabin temperatures to follow under certain conditions.

The FAA is issuing this AD to address excessively high flight deck or cabin temperatures, which may inhibit safe operation of the airplane by the flightcrew and
contribute to loss of continued safe flight and landing, or may cause physiological
distress to passengers and cabin crew.

**Comments**

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA’s response to each comment.

**Support for the NPRM**

The Air Line Pilots Association, International (ALPA), expressed support for the NPRM.

**Effect of Winglets on Accomplishment of the Proposed Actions**

Aviation Partners Boeing stated that the installation of winglets per Supplemental Type Certificate (STC) ST01518SE or STC ST01920SE does not affect the accomplishment of the manufacturer’s service instructions.

The FAA agrees with the commenter that neither STC ST01518SE nor STC ST01920SE affect the accomplishment of the manufacturer’s service instructions. Therefore, the installation of STC ST01518SE or STC ST01920SE does not affect the ability to accomplish the actions required by this AD. The AD has not been changed in this regard.

**Request to Correct a Checklist Step**

Boeing requested to remove “100%” from the non-normal checklist step for Oxygen Masks and Regulators. The commenter noted that the 100% oxygen specified in the operating procedures is not correct for this particular situation on the airplane. According to Boeing, the flightcrew should be using the normal diluter demand mask
regulator position, which is described in the non-normal checklist introduction in the Quick Reference Handbook part of the Flight Crew Operations Manual.

The FAA agrees with Boeing’s assessment and request. The “100%” indication has been removed from the non-normal checklist step for Oxygen Masks and Regulators in figures 4, 5, 6, and 7 to paragraph (g)(2) of this AD.

**Request to Not Require New Certificate Limitation**

American Airlines and United Airlines requested to remove the proposed requirement to revise the existing AFM certificate limitation chapter with a new certificate limitation. American Airlines also requested that if the requirement is not removed, figure 3 to paragraph (g)(1) of this AD be revised to specify the “Quick Reference Handbook,” rather than the “Operating Procedures chapter of this manual.” The commenters asserted that the Cabin Temperature Hot procedures currently exist in other reference material, and that operators will continue to follow those procedures. United Airlines further asserted that no precedent exists for adding a certificate limitation directing the accomplishment of an emergency or non-normal checklist.

The FAA does not agree to this request because the revision of the certificate limitation chapter makes the Cabin Temperature Hot procedures mandatory. The revised certificate limitation chapter also provides awareness to operators and flight standards that the actions are related to an unsafe condition and cannot be modified. As to the additional request to specify the “Quick Reference Handbook,” that publication cannot be specified because it is not controlled nor approved by the FAA. This requirement has not been changed in this AD.
Request Concerning a Planned Technical Solution

Lufthansa Technik (Lufthansa) asked whether a preventive technical solution, rather than the proposed reactive one, would be provided and mandated for the unsafe condition. The commenter said a technical solution such as a modification would prevent operators from getting into the situation that creates the unsafe condition.

The FAA agrees that a preventive technical solution to the unsafe condition would be a better option. Although no technical solution has yet been provided or proposed by Boeing, the corrective action required by this AD provides an adequate level of safety. Should we receive a technical solution from Boeing, the FAA may consider further rulemaking. The AD has not been changed with regard to this request.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and 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.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Costs of Compliance

The FAA estimates that this AD affects 866 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>AFM Revision</td>
<td>1 work-hour X $85 per hour = $85</td>
<td>$0</td>
<td>$85</td>
<td>$73,610</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,

(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 adding the following new airworthiness directive (AD):


(a) Effective Date

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

(b) Affected ADs

   None.
(c) Applicability

This AD applies to all The Boeing Company airplanes specified in paragraphs (c)(1) and (2) of this AD, certificated in any category.

(1) Model 757-200, -200PF, -200CB, and -300 series airplanes.

(2) Model 767-200, -300, and -300F series airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 21, Air conditioning.

(e) Unsafe Condition

This AD was prompted by reports of excessively high flight deck or cabin temperatures. The FAA is issuing this AD to address this condition, which may inhibit safe operation of the airplane by the flightcrew and contribute to loss of continued safe flight and landing, or may cause physiological distress to passengers and cabin crew.

(f) Compliance

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

(g) Airplane Flight Manual (AFM) Revisions

Within 60 days after the effective date of this AD, do the actions specified in paragraphs (g)(1) and (2) of this AD.

(1) Revise the “Certificate Limitations” chapter of the existing AFM to include the information specified in figure 1 to paragraph (g)(1), figure 2 to paragraph (g)(1), or figure 3 to paragraph (g)(1) of this AD, as applicable. This may be accomplished by inserting a copy of this AD into the existing AFM. When information identical to that in figure 1 to paragraph (g)(1), figure 2 to paragraph (g)(1), or figure 3 to paragraph
(g)(1) of this AD has been included in the “Certificate Limitations” chapter of the general revisions of the existing AFM, the general revisions may be inserted into the existing AFM, and the copy of this AD may be removed from the existing AFM.

### Figure 1 to paragraph (g)(1) – Model 757 Freighter Airplanes Certificate Limitation

<table>
<thead>
<tr>
<th>Required by AD 2020-04-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the event of excessively hot flight deck temperature, the flight crew must comply with the Cabin Temperature Hot Procedures in the Operating Procedures chapter of this manual.</td>
</tr>
</tbody>
</table>

### Figure 2 to paragraph (g)(1) – Model 767 Freighter Airplanes Certificate Limitation

<table>
<thead>
<tr>
<th>Required by AD 2020-04-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the event of excessively hot flight deck or main deck cargo compartment temperature, the flight crew must comply with the Cabin Temperature Hot Procedures in the Operating Procedures chapter of this manual.</td>
</tr>
</tbody>
</table>

### Figure 3 to paragraph (g)(1) – Model 757 and 767 Passenger Airplanes Certificate Limitation

<table>
<thead>
<tr>
<th>Required by AD 2020-04-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the event of excessively hot flight deck or passenger cabin temperature, the flight crew must comply with the Cabin Temperature Hot Procedures in the Operating Procedures chapter of this manual.</td>
</tr>
</tbody>
</table>

(2) Revise the “Operating Procedures” chapter of the existing AFM to include the information specified in figure 4 to paragraph (g)(2), figure 5 to paragraph (g)(2), figure 6 to paragraph (g)(2), or figure 7 to paragraph (g)(2) of this AD, as applicable. This may be accomplished by inserting a copy of this AD into the existing AFM. When information identical to that in figure 4 to paragraph (g)(2), figure 5 to paragraph (g)(2), figure 6 to paragraph (g)(2), or figure 7 to paragraph (g)(2) of this AD has been included in the “Operating Procedures” chapter of the general revisions of the existing
AFM, the general revisions may be inserted into the existing AFM, and the copy of this AD may be removed from the existing AFM.

**Figure 4 to paragraph (g)(2) – Model 757 Freighter Operating Procedures**

<table>
<thead>
<tr>
<th>AFM Cabin Temperature Hot Procedures</th>
<th>Required by AD 2020-04-15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>757 Freighter</strong></td>
<td></td>
</tr>
<tr>
<td>If flight deck temperature is excessively hot and could cause incapacitation:</td>
<td></td>
</tr>
<tr>
<td>Trim Air Switch</td>
<td>OFF</td>
</tr>
<tr>
<td>If outlet air stays excessively hot after one minute:</td>
<td></td>
</tr>
<tr>
<td>Trim Air Switch</td>
<td>ON</td>
</tr>
<tr>
<td>Pack Control Selectors (Both)</td>
<td>STBY-N</td>
</tr>
<tr>
<td>If outlet air stays excessively hot after one minute:</td>
<td></td>
</tr>
<tr>
<td>Left Pack Control Selector</td>
<td>OFF</td>
</tr>
<tr>
<td>If outlet air stays excessively hot after one minute:</td>
<td></td>
</tr>
<tr>
<td>Left Pack Control Selector</td>
<td>AUTO</td>
</tr>
<tr>
<td>Right Pack Control Selector</td>
<td>OFF</td>
</tr>
<tr>
<td>If outlet air stays excessively hot after one minute, descend to 10,000 ft. or minimum safe altitude, whichever is higher.</td>
<td></td>
</tr>
<tr>
<td>Reduce heat sources:</td>
<td></td>
</tr>
<tr>
<td>Utility Bus Switches (Both)</td>
<td>OFF</td>
</tr>
<tr>
<td>Shoulder Heaters and Foot Heaters (All)</td>
<td>OFF</td>
</tr>
<tr>
<td>When at level off, maintain 290 knots or greater.</td>
<td></td>
</tr>
<tr>
<td>If level off above 10,000 ft.:</td>
<td></td>
</tr>
<tr>
<td>Oxygen Masks and Regulators</td>
<td>ON</td>
</tr>
<tr>
<td>Crew Communications</td>
<td>ESTABLISH</td>
</tr>
<tr>
<td>Left Pack Control Selector</td>
<td>OFF</td>
</tr>
<tr>
<td>Manually depressurize and open outflow valve.</td>
<td></td>
</tr>
</tbody>
</table>
AFM Cabin Temperature Hot Procedures
757 Passenger

If flight deck or passenger cabin temperature is excessively hot and could cause incapacitation:

- Trim Air Switch ................................................. OFF
- If outlet air stays excessively hot after one minute:
  - Trim Air Switch .................................................. ON
  - Pack Control Selectors (Both) .......................... STBY-N
- If outlet air stays excessively hot after one minute:
  - Left Pack Control Selector ................................. OFF
- If outlet air stays excessively hot after one minute:
  - Left Pack Control Selector ............................... AUTO
  - Right Pack Control Selector .............................. OFF
- If outlet air stays excessively hot after one minute, descend to 10,000 ft. or minimum safe altitude, whichever is higher.
  - Reduce heat sources:
    - Utility Bus Switches (Both) ............................. OFF
    - Shoulder Heaters and Foot Heaters (All) ............ OFF
- When at level off, maintain 290 knots or greater.
  - If level off above 10,000 ft.:
    - Oxygen Masks and Regulators ............................. ON
    - Crew Communications ................................. ESTABLISH
- Left Pack Control Selector ................................. OFF
- Manually depressurize and open outflow valve.
AFM Cabin Temperature Hot Procedures
767 Freighter

If flight deck or main deck cargo compartment temperature is excessively hot and could cause incapacitation:

Trim Air Switch ................................................. OFF

If outlet air stays excessively hot after one minute:

Trim Air Switch ................................................. ON
Pack Control Selectors (Both) ............................... STBY-N

If outlet air stays excessively hot after one minute:

Left Pack Control Selector ................................. OFF

If outlet air stays excessively hot after one minute:

Left Pack Control Selector ................................. AUTO
Right Pack Control Selector ................................. OFF

If outlet air stays excessively hot after one minute, descend to
10,000 ft. or minimum safe altitude, whichever is higher.

Reduce heat sources:

Utility Bus Switches (Both) ............................... OFF
Shoulder Heaters and Foot Heaters (All) .......................... OFF

When at level off, maintain 290 knots or less.

If level off above 10,000 ft.:

Oxygen Masks and Regulators ............................... ON
Crew Communications .................................. ESTABLISH

Left Pack Control Selector ................................. OFF

Manually depressurize and open outflow valve.
AFM Cabin Temperature Hot Procedures
767 Passenger

If flight deck or passenger cabin temperature is excessively hot and could cause incapacitation:

- Trim Air Switch ................................................. OFF
- If outlet air stays excessively hot after one minute:
  - Trim Air Switch ................................................. ON
  - Pack Control Selectors (Both) ......................... STBY-N
- If outlet air stays excessively hot after one minute:
  - Left Pack Control Selector .......................... OFF
- If outlet air stays excessively hot after one minute:
  - Left Pack Control Selector .............................. AUTO
  - Right Pack Control Selector ......................... OFF
- If outlet air stays excessively hot after one minute, descend to 10,000 ft. or minimum safe altitude, whichever is higher.
  - Reduce heat sources:
    - Shoulder Heaters and Foot Heaters (All).......... OFF
    - Select galley equipment, IFE and main cabin door heaters off.
- When at level off, maintain 290 knots or less.
  - If level off above 10,000 ft.:
    - Oxygen Masks and Regulators ......................... ON
    - Crew Communications ................................. ESTABLISH
- Left Pack Control Selector .............................. OFF
- Manually depressurize and open outflow valve.
(h) 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 (i) 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.
(i) 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.

(j) Material Incorporated by Reference

None.

Issued on March 24, 2020.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft Certification Service.

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