Rules and Regulations

Federal Register
Vol. 87, No. 139
Thursday, July 21, 2022

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2022–0010; Project Identifier AD–2021–00850–T; Amendment 39–22120; AD 2022–15–01]

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 certain The Boeing Company Model 787–8, 787–9, and 787–10 airplanes. This AD was prompted by a report that during a C-check, corrosion was found in the vertical fin tension bolt hole located in the aluminum crown frames at a certain section. This AD requires inspecting certain vertical fin tension bolt holes; reviewing the bolt sealant application installation procedure in the existing maintenance or inspection program, as applicable; checking maintenance records to determine the replacement status of vertical fin tension bolts; and doing applicable on-condition actions. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective August 25, 2022.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of August 25, 2022.

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, 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 at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2022–0010.

Examining the AD Docket

You may examine the AD docket at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2022–0010; 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 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: Greg Rutar, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone: 206–231–3529; email: *greg.rutar@faa.gov.*

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 787–8, 787–9, and 787–10 airplanes. The NPRM published in the **Federal Register** on February 15, 2022 (87 FR 8436). The NPRM was prompted by a report that during a C-check, corrosion was found in the vertical fin tension bolt hole located in the aluminum crown frames at Section 48. In the NPRM, the FAA proposed to require inspecting certain vertical fin tension bolt holes; reviewing the bolt sealant application installation procedure in the existing maintenance or inspection program, as applicable; checking maintenance records to determine the replacement status of vertical fin tension bolts; and doing applicable on-condition actions. The FAA is issuing this AD to address undetected corrosion, which could lead to the structure falling below residual strength requirements and the loss of the vertical fin, and result in loss of control of the airplane.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from Air Line Pilots Association, International (ALPA) and Boeing who supported the NPRM without change.

The FAA received additional comments from one commenter, United Airlines (UAL). The following presents the comments received on the NPRM and the FAA's response to each comment.

Request To Revise the Exception Requirement for a Repair

UAL requested that the FAA revise the exception requirement for a repair. UAL stated that paragraph (h)(2) of the proposed AD specifies that repairs require an operator to contact Boeing for repair instructions and to do the repair using a method approved in accordance with the procedures specified in paragraph (i) of the proposed AD. UAL commented that in paragraph E.2. ''Work Instructions'' of Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021, it requires, for Condition 2, Action 1 and Condition 7.2, Action 1, to contact Boeing for repair instructions if ''any corrosion or any finish degradation found.'' UAL commented that per Note 11 of paragraph E.1. ''General Information'' of Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021, finish degradation is defined as ''deterioration, delamination, excessive wear, or erosion of surface, substrates, or coating.'' UAL stated that since primer is considered a protective coating, any degradation of primer at the bolt hole would require repair instructions approved by an alternative method of compliance (AMOC); however, Tasks 2, 4, 6, and 8 of Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021, already contain primer instructions if there is degradation, which specifies to, ''Apply two coats of BMS 10–11, Type 1 primer if bolt hole in the aluminum frame has protective finish degradation.'' UAL commented that, therefore, it should not be necessary to contact Boeing and obtain an AMOC for a repair approval if only primer degradation is found in the bolt hole. UAL also noted that it expects some primer degradation to

occur based on the action of removing the bolts for the inspection (*i.e.,* chafing between bolt shank and adjacent hole).

UAL stated that since the instructions for primer degradation and application are already specified in Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021, it would like clarification that primer degradation and application does not fall within the category of ''finish degradation'' and does not require an AMOC for a repair approval. UAL stated that its request meets an acceptable level of safety since primer coatings would be restored if required, preventing the safety concern of bolt hole corrosion.

The FAA agrees with the commenter's request. The FAA agrees that Task 2, 4, 6, and 8 in Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021, contain primer application instructions if there is finish degradation; therefore, a request for an AMOC repair approval as specified in paragraph (i) of this AD is not required. Primer is the only bolt hole finish in the aluminum frame, therefore ''primer degradation'' is the only ''finish degradation'' that would be found in the inspected area. The FAA has revised paragraph (h)(2) of this AD to specify that if only finish degradation (no corrosion) is found, this AD requires applying two coats of BMS 10–11, Type 1 primer as specified in Tasks 2, 4, 6, and 8 of the Accomplishment Instructions of Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021. This service information specifies, depending on airplane configuration, procedures for a detailed inspection of the vertical fin tension bolt holes (16 locations) in the aluminum crown frames, composite deck, and root fittings for corrosion and finish degradation; a review of the existing maintenance or inspection program, as applicable, related to the vertical fin tension bolt installation procedure to determine if the sealant application is correct; a review of the maintenance records to determine if a vertical fin tension bolt has been replaced and to determine the sealant application procedure that was used; and applicable on-condition actions. On-condition actions include applying sealant and installing new vertical fin tension bolts and barrel nuts; revising the existing maintenance or inspection program, as applicable, to include the minimum requirement for the correct vertical fin tension bolt sealant application procedure; a detailed inspection for corrosion and finish degradation of only the affected vertical fin tension bolt holes in the aluminum crown frame, composite deck, and root fittings; and repair.

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 **ADDRESSES**.

Costs of Compliance

The FAA estimates that this AD affects 116 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection (16 locations), sealant application, and bolt/nut installation.	5.2 work-hours × $85 per hour = $442	$20,580	$21,022	$2,438,552
Review the existing maintenance or inspection program, as applicable.	1 work-hour × $85 per hour = $85	0	85	9,860
Records review	1 work-hour × $85 per hour = $85	0	85	9,860

The FAA estimates the following costs to do any necessary detailed inspection of the affected holes that would be required based on the results of the actions in this AD. The agency has no way of determining the number of aircraft that might need these on-condition actions:

ON-CONDITION COSTS *

Action	Labor cost	Parts cost	Cost per product
Inspection	5 work-hours × $85 per hour = $425	$0	$425

* Does not include cost of revising the maintenance program.

The FAA has determined that revising the existing maintenance or inspection program, if required, takes an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, the FAA estimates the average total cost per operator to be $7,650 (90 work-hours × $85 per work-hour).

The FAA has received no definitive data on which to base the cost estimates for the repair specified in this AD.

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

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.

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:

2022–15–01 The Boeing Company: Amendment 39–22120; Docket No. FAA–2022–0010; Project Identifier AD–2021–00850–T.

(a) Effective Date

This airworthiness directive (AD) is effective August 25, 2022.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 787–8, 787–9, and 787–10 airplanes, certificated in any category, as identified in Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021.

(d) Subject

Air Transport Association (ATA) of America Code 55, Stabilizers.

(e) Unsafe Condition

This AD was prompted by a report that during a C-check, corrosion was found in the vertical fin tension bolt hole located in the aluminum crown frames at Section 48. The FAA is issuing this AD to address undetected corrosion, which could lead to the structure falling below residual strength requirements and the loss of the vertical fin, and result in loss of control of the airplane.

(f) Compliance

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

(g) Required Actions

Except as specified by paragraph (h) of this AD: At the applicable times specified in the ''Compliance'' paragraph of Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin B787–81205–SB550010–00, Issue 001, dated May 24, 2021, which is referred to in Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021.

(h) Exceptions to Service Information Specifications

(1) Where the Compliance Time columns of the tables in the ''Compliance'' paragraph of Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021, use the phrase ''the Issue 1 date of Requirements Bulletin B787–81205–SB550010–00 RB,'' this AD requires using ''the effective date of this AD.''

(2) Where Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021, specifies contacting Boeing for repair instructions, this AD requires doing the repair using a method approved in accordance with the procedures specified in paragraph (i) of this AD, except if only finish degradation (no corrosion) is found, this AD requires applying two coats of BMS 10–11, Type 1 primer, as specified in Tasks 2, 4, 6, and 8 of Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021.

(i) 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 responsible Flight Standards 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 (j) 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 responsible Flight Standards 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.

(j) Related Information

For more information about this AD, contact Greg Rutar, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone: 206–231–3529; email: *greg.rutar@faa.gov.*

(k) 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.

(i) Boeing Alert Requirements Bulletin B787–81205–SB550010–00 RB, Issue 001, dated May 24, 2021.

(ii) [Reserved]

(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, *fr.inspection@nara.gov,* or go to: *https://www.archives.gov/federal-register/cfr/ibr-locations.html.*

Issued on July 7, 2022.

Christina Underwood,

Acting Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2022–15492 Filed 7–20–22; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2022–0469; Project Identifier MCAI–2021–00124–Q; Amendment 39–22121; AD 2022–15–02]

RIN 2120–AA64

Airworthiness Directives; Cameron Balloons Ltd. Burner Assemblies

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Cameron Balloons Ltd. (Cameron) Stratus double burner assemblies installed on hot air balloons. This AD was prompted by reports from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI identifies the unsafe condition as fatigue cracking of the weld on Stratus double burner hangers. This AD requires repetitively inspecting certain Stratus double burner hangers and replacing certain Stratus double burners, and prohibits installing certain parts. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective August 25, 2022.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of August 25, 2022.

ADDRESSES: For service information identified in this final rule, contact Cameron Balloons Ltd., St Johns Street, Bedminster, Bristol, BS3 4NH, United Kingdom; phone: +44 0 117 9637216; email: *technical@cameronballoons.co.uk*; website: *https://www.cameronballoons.co.uk.* You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222–5110. It is also available at *https://www.regulations.gov* under Docket No. FAA–2022–04690469.

Examining the AD Docket

You may examine the AD docket at *https://www.regulations.gov* under Docket No. FAA–2022–0469; 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 MCAI, 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: Mike Kiesov, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329–4144; email: *mike.kiesov@faa.gov.*

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Cameron Stratus double burner assembly part number (P/N) CB8720 and P/N CB8721 installed on hot air balloons. The NPRM published in the **Federal Register** on May 5, 2022 (87 FR 26699). The NPRM was based on MCAI from the European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA issued AD 2021–0042, dated January 29, 2021 (referred to after this as ''the MCAI''), to address the unsafe condition on all hot air balloons. The MCAI states:

> An occurrence was been reported of a Stratus burner hanger, [part number] P/N CB8504, failing after landing, leaving one burner unit detached from the load frame. Investigation revealed a limited number of similar failures. Comparable issues have been experienced with other parts of the Stratus product line (see Australian [Civil Aviation Safety Authority] CASA AWB 14–001 [Airworthiness Bulletin AWB 14–001, Issue 3, dated February 5, 2021]). The suspected cause is fatigue cracking of the weld, caused mainly during ground transportation with the burner erect, combined with an overload event.
>
> This condition, if not detected and corrected, could lead to burner falling on the balloon occupant's head, resulting in injury to balloon occupants. It could also lead to an uncontrolled cold descent and hard landing, possibly resulting in injury to balloon occupants and persons on the ground.
>
> To address this potential unsafe condition, Cameron Balloons issued the SB [Service Bulletin 28, Revision 3, dated February 3, 2021], providing inspection and replacement instructions. It was determined that some burner hangers cannot be inspected as they are covered with a doubler plate to reinforce the central part of the hanger bracket.
>
> For the reasons described above, this [EASA] AD requires repetitive detailed inspections (DET) of the affected parts A and, depending on findings, replacement with a serviceable part. This [EASA] AD also requires direct replacement of the burner hanger installed on affected parts B.

You may examine the MCAI in the AD docket at *https://www.regulations.gov* under Docket No. FAA–2022–0469.

In the NPRM, the FAA proposed to require repetitively inspecting certain Stratus double burner hangers and replacing certain other Stratus double burners. The FAA also proposed to prohibit installing certain parts. The FAA is issuing this AD to prevent burners from separating from the balloon. The unsafe condition, if not addressed, could result in an uncontrolled cold descent and hard landing of the balloon.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Cameron Balloons Service Bulletin 28, Revision 3, dated February 3, 2021. The service information specifies identifying the Stratus double burner hanger, inspecting it in accordance with Cameron Balloons SB28: Accomplishment Instructions, Stratus Double Burner; Mounting Hanger Inspection, CBL/TN/DCB/3191, Issue B, dated February 4, 2020 (CBL/TN/DCB/3191 Issue B), and replacing it if there are any cracks.