[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-1479; Project Identifier AD-2022-00703-T]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all The Boeing Company Model 737-100, 737-200, 737-200C, 737-300, 737-400, 737-500, 737-600, 737-700, 737-700C, 737-800, 737-900, 737-900ER, 757-200, 757-200PF, 757-200CB, 757-300, 767-200, 767-300, 767-300F, and 767-400ER series airplanes. This proposed AD was prompted by reports indicating premature aging of certain passenger chemical oxygen generators. This proposed AD would require repetitively replacing affected chemical oxygen generators with serviceable parts. This proposed AD would also limit the installation of affected parts. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA 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 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.

Examining the AD Docket

You may examine the AD docket at regulations.gov by searching for and locating Docket No. FAA-2022-1479; 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 NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Nicole S. Tsang, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3959; email: nicole.s.tsang@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2022-1479; Project Identifier AD-2022-00703-T" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal 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, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

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 NPRM 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 NPRM, 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 NPRM. Submissions containing CBI should be sent to Nicole S. Tsang, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3959; email: nicole.s.tsang@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.

Background

The FAA has been notified by the European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, of an issue with the B/E Aerospace 117042-XX series chemical oxygen generators installed on certain Airbus airplanes. The units may fail to deliver oxygen to passengers during an emergency on the airplane. To address this issue on certain Airbus airplanes, EASA issued AD 2015-0117, dated June 24, 2015, corrected August 7, 2015, and AD 2019-0140, dated June 12, 2019. The FAA issued corresponding AD 2016-16-02, Amendment 39-18600 (81 FR 53255, August 12, 2016), and AD 2020-04-18,

Amendment 39-19855 (85 FR 14409, March 12, 2020), respectively, which require the replacement of units older than 10 years and impose a 10-year life limit on all 117042-XX series generators.

The FAA released Special Airworthiness Information Bulletin NM-17-17, dated June 19, 2017, which indicated that the FAA and B/E Aerospace Systems planned to conduct further investigation of chemical oxygen generators in the 117080 series that are 10 to 15 years old since date of manufacture, to determine if these generators have an issue similar to the 117042 series generators.

The reduction of useful life was changed for 117080-02, 117080-03, and 117080-04 series chemical oxygen generators from 15 years to 10 years. Collins Aerospace has Parts Manufacturer Approval (PMA) for 117080-02, 117080-03, and 117080-04 series chemical oxygen generators on all Boeing Model 737-100, 737-200, 737-200C, 737-300, 737-400, 737-500, 737-600, 737-700, 737-700C, 737-800, 737-900, 757-200, 757-200PF, 757-200CB, 757-300, 767-200, 767-300, 767-300F, and 767-400ER series airplanes. However, the applicability of this proposed AD also includes Boeing Model 737-900ER series airplanes. The FAA determined that Boeing Model 737-900ER series airplanes are affected because there is concern that operators might mistake the 737-900ER as a sub-model of the 737-900, and the 117080-0X series of chemical oxygen generators might be installed on Boeing Model 737-900ER series airplanes.

Collins Aerospace has observed that mis-actuations are possible 10 years after the manufacturing date and increase in likelihood as the 15-year life is approached. The mis-actuations are associated with the tin-based chemistry used to manufacture the generators and specifically appear to be caused by oxidation of tin fuel added to the chemical core. Collins Aerospace's investigation and analysis concluded that the chemical core oxidizes in a manner similar to the 117042-XX series chemical oxygen generators. This condition,

if not addressed, could lead to failure of the generator to activate and consequently not deliver oxygen during an emergency, possibly resulting in injury to airplane occupants.

FAA's Determination

The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design. 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 the State of Design Authority, the FAA has been notified of the unsafe condition described in the AD and service information referenced above. The FAA is proposing this AD because the FAA evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Related Service Information

Collins Aerospace Service Information Letter (SIL) 117080-SIL-002, dated May 4, 2022, specifies procedures for replacing affected chemical oxygen generators.

Proposed AD Requirements in this NPRM

This proposed AD would require inspecting the date of manufacture of chemical oxygen generators having part numbers 117080-02, 117080-03, and 117080-04, and replacing affected generators with serviceable units. This proposed AD would also limit the installation of passenger chemical oxygen generators to serviceable units.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 3,419 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	4 work-hours X $85 per hour = $340	$0	$340	$1,162,460
Replacement	0.50 work-hour X $85 per hour = $43 per replacement cycle	Up to $445	Up to $488 per replacement cycle	$1,668,472 per replacement cycle

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 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) Would not affect intrastate aviation in Alaska, and

(3) Would 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 adding the following new airworthiness directive:

The Boeing Company: Docket No. FAA-2022-1479; Project Identifier AD-2022-00703-T.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 737-100, 737-200, 737-200C, 737-300, 737-400, 737-500, 737-600, 737-700, 737-700C, 737-800, 737-900, 737-900ER, 757-200, 757-200PF, 757-200CB, 757-300, 767-200, 767-300, 767-300F, and 767-400ER series airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 35, Oxygen.

(e) Unsafe Condition

This AD was prompted by reports of premature aging of certain chemical oxygen generators. The FAA is issuing this AD to address this premature aging that resulted in the generators failing to activate, which could fail to deliver oxygen during an emergency, possibly resulting in injury to the airplane occupants.

(f) Compliance

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

(g) Oxygen Generator Part Number Inspection

Within 30 days after the effective date of this AD: Inspect passenger chemical oxygen generators having part numbers 117080-02, 117080-03, and 117080-04 to determine their date of manufacture. A review of airplane maintenance records is acceptable for the inspection, provided the date of manufacture can be conclusively determined by that review.

(h) Definition

For purposes of this AD, a serviceable unit is a passenger chemical oxygen generator that meets the condition specified in either paragraph (h)(1) or (2) of this AD.

(1) Part numbers 117080-02, 117080-03, and 117080-04, with a manufacturing date not older than 10 years.

(2) Approved part numbers other than 117080-02, 117080-03, and 117080-04, provided the generator has not exceeded the life limit established for that generator by the manufacturer.

(i) Oxygen Generator Replacement

For any passenger chemical oxygen generators having part numbers 117080-02, 117080-03, and 117080-04: At the applicable time specified in paragraph (i)(1) through

(3) of this AD, replace the chemical oxygen generator with a serviceable unit, as defined in this AD. Thereafter, replace chemical oxygen generators having part numbers 117080-02, 117080-03, and 117080-04 before exceeding 10 years since date of manufacture.

Note 1 to paragraph (i): Additional guidance for replacing the affected passenger chemical oxygen generators can be found in Collins Aerospace Service Information Letter 117080-SIL-002, dated May 4, 2022, and approved maintenance procedures.

(1) For passenger chemical oxygen generators that have a date of manufacture in 2008 or earlier: Replace within 6 months after the effective date of this AD or 15 years since the date of manufacture, whichever occurs earlier.

(2) For passenger chemical oxygen generators that have a date of manufacture in 2009 or 2010: Replace within 12 months after the effective date of this AD.

(3) For passenger chemical oxygen generators that have a date of manufacture in 2011, 2012, or 2013: Replace within 24 months after the effective date of this AD.

(j) Parts Installation Limitation

As of the effective date of this AD, no person may install a passenger chemical oxygen generator, unless the oxygen generator is a serviceable unit, as defined in this AD.

(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 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 (l)(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 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.

(l) Related Information

(1) For more information about this AD, contact Nicole S. Tsang, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3959; email: nicole.s.tsang@faa.gov.

(2) For Collins Aerospace service information identified in this AD that is not incorporated by reference, contact Collins Aerospace, 15701 West 95th Street, Lenexa, KS 66219; email ISPublications@collins.com; website tpi.beaerospace.com/Authentication. 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.

(m) Material Incorporated by Reference

None.

Issued on November 10, 2022.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2022-26592 Filed: 12/8/2022 8:45 am; Publication Date: 12/9/2022]