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 Courtney Tuck, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone 206–231–3986; email *Courtney.K.Tuck@faa.gov.*

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Special Attention Service Bulletin 767–25–0539, Revision 2, dated January 27, 2023.

(ii) Boeing Special Attention Service Bulletin 767–25–0549, Revision 2, dated January 27, 2023.

(3) For Boeing material identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Boulevard, MC 110–SK57, Seal Beach, CA 90740–5600; phone 562–797–1717; website *myboeingfleet.com.*

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

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit *www.archives.gov/federal-register/cfr/ibr-locations* or email *fr.inspection@nara.gov.*

Issued on January 6, 2025.

Suzanne Masterson,

Deputy Director, Integrated Certificate Management Division, Aircraft Certification Service.

[FR Doc. 2025–02146 Filed 2–3–25; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2024–0471; Project Identifier MCAI–2023–01213–T; Amendment 39–22920; AD 2024–26–05]

RIN 2120–AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Airbus SAS Model A300 B4–601, B4–603, B4–620, B4–622, B4–605R, B4–622R, C4–605R Variant F, F4–605R, and F4–622R airplanes; Model A310 series airplanes; Model A318, A319, A320, and A321 series airplanes; Model A330–200, –200 Freighter, and –300 series airplanes; Model A330–841 and –941 airplanes; and Model A340–211, –212, –213, –311, –312, –313, –541, and –642 airplanes. This AD was prompted by chemical oxygen generators that failed to activate in service and during maintenance activities. This AD requires replacing affected oxygen generators and prohibits the installation of affected parts, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective March 11, 2025.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of March 11, 2025.

ADDRESSES:

AD Docket: You may examine the AD docket at *regulations.gov* under Docket No. FAA–2024–0471; 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 mandatory continuing airworthiness information (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.

Material Incorporated by Reference:

- For EASA material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email *ADs@easa.europa.eu;* website *easa.europa.eu.* You may find this material on the EASA website at *ad.easa.europa.eu.*
- You may view this material 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 *regulations.gov* under Docket No. FAA–2024–0471.

FOR FURTHER INFORMATION CONTACT: Dan Rodina, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 206–231–3225; email *dan.rodina@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 all Airbus SAS Model A300 B4–601, B4–603, B4–620, B4–622, B4–605R, B4–622R, C4–620, C4–605R Variant F, F4–605R and F4–622R airplanes, Model 300 F4–608ST airplanes, Model A310–203, –203C, –204, –221, –222, –304, –308, –322, –324, and –325 airplanes, Model A318–111, –112, –121, and –122 airplanes, Model A319–111, –112, –113, –114, –115, –131, –132, –133, –151N, –153N, and –171N airplanes, Model A320–211, –212, –214, –215, –216, –231, –232, –233, –251N, –252N, –253N, –271N, –272N, and –273N airplanes, Model A321–111, –112, –131, –211, –212, –213, –231, –232, –251N, –252N, –253N, –271N, –272N, –251NX, –252NX, –253NX, –271NX, and –272NX airplanes, Model A330–201, –202, –203, –223, –243, –223F, –243F, –301, –302, –303, –321, –322, –323, –341, –342, –343, –743L, –841, and –941 airplanes, and Model A340–211, –212, –213, –311, –312, –313, –541, –542, –642, and –643 airplanes. Model A300 F4–608ST, A300 C4–620, A310–203C, A310–308, A320–215, A330–743L, A340–542, and A340–643 airplanes are not certificated by the FAA and are not included on the U.S. type certificate data sheet; this AD therefore does not include those airplanes in the applicability. The NPRM published in the **Federal Register** on March 22, 2024 (89 FR 20360). The NPRM was prompted by AD 2023–0209, dated November 22, 2023, issued by EASA, which is the Technical Agent for the Member States of the European Union (EASA AD 2023–0209). EASA AD 2023–0209 states occurrences were reported of chemical oxygen generators failing to activate in service and during maintenance activities. Subsequent investigations identified poor reactivity of the start powder used inside the oxygen generator. This condition, if not corrected, could lead to a reduction of the available oxygen capacity of the airplane, possibly resulting in injury to the airplane occupants.

In the NPRM, the FAA proposed to require replacing affected oxygen generators, as specified in EASA AD 2023–0209. The NPRM also proposed to prohibit the installation of affected parts. The FAA is issuing this AD to address the unsafe condition on these products.

Actions Since the NPRM Was Issued

Since the FAA issued the NPRM, EASA superseded EASA AD 2023–0209

and issued EASA AD 2024–0198, dated October 18, 2024 (EASA AD 2024–0198) (also referred to as the MCAI), to correct an unsafe condition for the airplanes identified in EASA AD 2023–0209, as well as Model A321–253NY airplanes. The MCAI states that a new airplane model (A321–253NY) has been certified, and although affected parts could be installed on Model A321–253NY airplanes in service, no Model A321–253NY airplane has yet been delivered to operators. The MCAI also states that for airplanes previously affected by EASA AD 2023–0209, this EASA AD retains the requirements of that AD, with no additional actions.

The FAA has confirmed that there are no Model A321–253NY airplanes on the U.S. Register, and no new actions are required by EASA AD 2024–0198. Therefore, the FAA has revised paragraphs (g) and (h)(1) of this AD to refer to EASA AD 2024–0198.

You may examine the MCAI in the AD docket at *regulations.gov* under Docket No. FAA–2024–0471.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from Delta Air Lines (Delta) and United Airlines (United). The following presents the comments received on the NPRM and the FAA's response to each comment.

Requests To Remove Requirement To Return Parts

Delta and United requested removal of the requirement to return affected oxygen generators to Collins Aerospace, as specified in paragraph (h)(3) of the proposed AD. Delta stated that oxygen generators removed before the effective date of the AD will have already been shipped for offsite disposal in accordance with Delta's procedures,[1] which specify that an oxygen generator removed as unserviceable and not intended to be reinstalled on an airplane is manually activated to allow the release of oxygen prior to shipment for offsite disposal.

Delta added that the service information referenced in EASA AD 2023–0209 specifies to return affected oxygen generators to Collins Aerospace with the instruction ''DO NOT activate the generator (it must be shipped not activated, but secured with safety pin, for the purpose of the investigation).'' Delta stated that this instruction will result in significant changes to current procedures that comply with DOT HM224B and hazardous waste disposal requirements, and may also infringe on some state-specific hazardous waste requirements.

United concurred with the requirements of the proposed AD, except for the requirement to ship affected oxygen generators to the original equipment manufacturer (OEM). United stated that transporting discrepant oxygen generators increases the risk to an operator of being noncompliant with HAZMAT/DG regulations.[2] United asserted that returning suspect oxygen generators would not enhance the level of safety for airline operators, but would do the opposite. According to United, Collins Aerospace confirmed that their testing showed that the suspect failure condition has been contained to a few lots, and that the return of suspect units from participating operators will further validate the containment of the total population of affected units. United therefore concluded that the return of affected oxygen generators should be voluntary.

The FAA agrees to remove the requirement to return affected oxygen generators to Collins Aerospace due to the risk of noncompliance with HAZMAT/DG regulations. Although EASA has indicated that returning affected parts will help determine the cause of the unsafe condition, the FAA has determined that the data obtained from the returned parts does not outweigh the risk of noncompliance with HAZMAT/DG regulations. Therefore, paragraph (h)(4) of this AD has been revised to only require reporting inspection results to the OEM.

Request To Specify AMM Task for Oxygen Generator Replacement

Delta requested that an exception be added to specify the applicable AMM task required to replace affected generators for oxygen container/generator removal and installation. Paragraph (1) of EASA AD 2023–0209 specifies replacing affected parts in accordance with the instructions of the AOT. The AOT referenced in EASA AD 2023–0209 requires in paragraph 5.6 that operators remove and replace the affected oxygen generator in accordance with Collins Aerospace Service Bulletin XXCXX–35–001, dated October 6, 2023, and AMM instructions for removal/installation of the emergency oxygen generators. Because both instructions are required for compliance, and because the instructions do not provide the exact same instructions, Delta stated it is difficult to determine which instructions to follow. Delta asserted that AMM tasks for removing the affected units provide standard practices to effectively replace the oxygen generator, and no additional instructions from the Collins service bulletin are necessary. Additionally, many operators, including Delta, have supplemental type certificates (STCs) for interior modifications that might involve replacing the oxygen container with an oxygen panel or some other part label. These STCs will have separate instructions from those called out in the AOT, but they can still contain affected oxygen generators and therefore must be inspected.

The FAA agrees with the request, for the reasons provided by the commenter. The replacement required by this AD can be done using the applicable AMM task for oxygen container/generator removal and installation. The FAA has added paragraph (h)(4) to this AD to specify that where the service information referenced in EASA AD 2024–0198 specifies a method of compliance for removal and installation of the oxygen container/generator in accordance with the service information or aircraft maintenance manual, for this AD, either method is acceptable.

Request To Clarify Mandatory RC Steps

Paragraph (1) of EASA AD 2023–0209 specified replacing affected parts in accordance with ''the instructions of the AOT,[3]'' but the exception in paragraph (h)(2) of the proposed AD specified replacing affected parts in accordance with ''paragraph 5.6 of the AOT.'' Because paragraphs 5.1, 5.4, 5.5, and 5.6 of the AOT are RC (required for compliance), Delta noted a potential conflict in paragraph (i)(3) of the proposed AD, which stated ''if any service information referenced in EASA AD 2023–0209 contains paragraphs that are labeled as RC, the instructions in RC paragraphs, including subparagraphs under an RC paragraph, must be done to comply with this AD.'' Delta therefore requested that the proposed AD clarify whether only paragraph 5.6 of the AOT would be required, or whether paragraphs 5.1, 5.4, and 5.5 are would also be required.

The FAA provides the following clarification. The FAA acknowledges that paragraph (i)(3) of the proposed AD should also have included an exception to paragraph (h)(2) of the proposed AD

[1] Delta follows Federal Aviation Regulations (Reference DOT HM–224B (49 CFR parts 173, 175 and 178)) and federal and local hazardous waste disposal for handling and shipping requirements.

[2] 49 CFR 173.168.

[3] EASA AD 2023–0209 defines the AOT as Airbus All Operators Transmission (AOT) A35L021–23, AOT A35N020–23, and AOT A35W022–23, all dated October 10, 2023.

(paragraph (h)(3) in this AD). The FAA has revised paragraph (i)(3) of this AD accordingly.

Request for Revised/Alternative Identification Criteria

Delta requested that an exception be added to the proposed AD to allow operators to identify affected units by the part number (PN) and date of manufacture, instead of the part number and serial number as specified in EASA AD 2023–0209. EASA AD 2023–0209 defines an affected part as ''any chemical oxygen generator having part number (PN) E63320–00, PN E63340–00 or PN E63440–00 and a serial number (SN) BEBJF002–XXX, BEBJ–F007–XXX, BEBJ–F008–XXX or BEBJ–F011–XXX (where 'XXX' represents any numerical sequence and is the specific number of this generator).'' Delta stated that Collins Aerospace, Airbus, and EASA have verified that the list of affected oxygen generator part numbers and serial numbers correspond to units manufactured in 2010. Delta asserted that chemical oxygen generators are life limited by the FAA and therefore tracked based on the date of manufacture. Therefore, Delta requested using the conservative criterion of the date of manufacturer to identify affected oxygen generators.

The FAA disagrees with the request. The FAA has found no clear correlation between the date of manufacture and the OEM's serial number. Therefore, to ensure that all affected units are correctly identified, operators must use serial numbers, as specified in EASA AD 2024–0198.

Request To Clarify Serviceable Parts

Delta requested that an additional exception be added to the proposed AD to further clarify parts eligible for installation, using the EASA AD definition of serviceable part: ''any oxygen generator, eligible for installation, which is not an affected part.'' Delta noted, however, that paragraph 5.6 of the AOT requires that an affected generator be replaced by an unaffected oxygen generator ''with the same PN,'' with no requirement that it should not be an affected part and restricting it to the same part number.

The FAA agrees with the request. The FAA has revised paragraph (h)(3) of this AD to specify to replace each affected part with an oxygen generator, eligible for installation, which is not an affected part.

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, considered the comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. 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.

Material Incorporated by Reference Under 1 CFR Part 51

EASA AD 2024–0198 specifies procedures for replacing affected oxygen generators, which includes reporting and returning affected parts to the manufacturer. EASA AD 2024–0198 also prohibits the installation of affected parts. This material 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 1,975 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

ESTIMATED COSTS FOR REQUIRED ACTIONS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement	1 work-hour × $85 per hour = $85	$500	$585	$585 per oxygen generator.*
Reporting	1 work-hour × $85 per hour = $85	0	85	$167,875.

* Based upon various airplane sizes and configurations there could, on average, be 30 affected generators per airplane.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120–0056. Public reporting for this collection of information is estimated to take approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177–1524.

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:

2024–26–05 Airbus SAS: Amendment 39–22920; Docket No. FAA–2024–0471; Project Identifier MCAI–2023–01213–T.

(a) Effective Date

This airworthiness directive (AD) is effective March 11, 2025.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Airbus SAS airplanes, certificated in any category, identified in paragraphs (c)(1) through (8) of this AD.

(1) Model A300 B4–601, B4–603, B4–620, B4–622, B4–605R, B4–622R, C4–605R Variant F, F4–605R, and F4–622R airplanes.

(2) Model A310–203, –204, –221, –222, –304, –322, –324, and –325 airplanes.

(3) Model A318–111, –112, –121, and –122 airplanes.

(4) Model A319–111, –112, –113, –114, –115, –131, –132, –133, –151N, –153N, and –171N airplanes.

(5) Model A320–211, –212, –214, –216, –231, –232, –233, –251N, –252N, –253N, –271N, –272N, and –273N airplanes.

(6) Model A321–111, –112, –131, –211, –212, –213, –231, –232, –251N, –252N, –253N, –271N, –272N, –251NX, –252NX, –253NX, –271NX, –272NX, and A321–253NY airplanes.

(7) Model A330–201, –202, –203, –223, –223F, –243, –243F, –301, –302, –303, –321, –322, –323, –341, –342, –343, –841, and –941 airplanes.

(8) Model A340–211, –212, –213, 311, –312, –313, –541, and –642 airplanes.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by reported occurrences of chemical oxygen generators failing to activate in service and during maintenance activities. The FAA is issuing this AD to address poor reactivity of the start powder used inside the affected oxygen generators. The unsafe condition, if not addressed, could lead to a reduction of the available oxygen capacity of the airplane and could result in injury to airplane occupants.

(f) Compliance

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

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2024–0198, dated October 18, 2024 (EASA AD 2024–0198).

(h) Exceptions to EASA AD 2024–0198

(1) Where EASA AD 2024–0198 refers to December 6, 2023 (the effective date of EASA AD 2023–0209, dated November 22, 2023), this AD requires using the effective date of this AD.

(2) Where EASA AD 2024–0198 refers to its effective date, this AD requires using the effective date of this AD.

(3) Where paragraph (1) of EASA AD 2024–0198 specifies to ''replace each affected part with a serviceable part in accordance with the instructions of the AOT,'' this AD requires replacing that text with ''replace each affected part with an oxygen generator, eligible for installation, which is not an affected part, in accordance with paragraph 5.6 of the AOT.''

(4) Where the service information referenced in EASA AD 2024–0198 specifies a method of compliance for removal and installation of the oxygen container/generator in accordance with the service information or aircraft maintenance manual, for this AD, either method is acceptable.

(5) The service information referenced in EASA AD 2024–0198 specifies to report inspection results to Airbus and return affected oxygen generators to Collins Aerospace. For this AD, reporting inspection results is required at the applicable time specified in paragraph (h)(5)(i) or (ii) of this AD, but returning affected oxygen generators to Collins Aerospace is not required by this AD.

(i) If the affected oxygen generator was replaced on or after the effective date of this AD: Submit the report within 40 days after the replacement.

(ii) If the affected oxygen generator was replaced before the effective date of this AD: Submit the report within 40 days after the effective date of this AD.

(6) This AD does not adopt the ''Remarks'' section of EASA AD 2024–0198.

(i) Additional AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, AIR–520, Continued Operational Safety 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 Continued Operational Safety Branch, mail it to the address identified in paragraph (j) of this AD. Information may be emailed to: *AMOC@faa.gov.* Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer:* For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, AIR–520, Continued Operational Safety Branch, FAA; or EASA; or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC):* Except as required by paragraphs (h)(3), (h)(4), and (i)(2) of this AD, if any service information referenced in EASA AD 2024–0198 contains paragraphs that are labeled as RC, the instructions in RC paragraphs, including subparagraphs under an RC paragraph, must be done to comply with this AD; any paragraphs, including subparagraphs under those paragraphs, that are not identified as RC are recommended. The instructions in paragraphs, including subparagraphs under those paragraphs, not identified 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 instructions identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to instructions identified as RC require approval of an AMOC.

(j) Additional Information

For more information about this AD, contact Dan Rodina, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 206–231–3225; email *dan.rodina@faa.gov.*

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2024–0198, dated October 18, 2024.

(ii) [Reserved]

(3) For EASA AD material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email *ADs@easa.europa.eu;*

website *easa.europa.eu.* You may find this EASA AD on the EASA website at *ad.easa.europa.eu.*

(4) You may view this material 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 material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit *www.archives.gov/federal-register/cfr/ibr-locations,* or email *fr.inspection@nara.gov.*

Issued on December 19, 2024.

Suzanne Masterson,

Deputy Director, Integrated Certificate Management Division, Aircraft Certification Service.

[FR Doc. 2025–02133 Filed 2–3–25; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2024–2325; Project Identifier AD–2024–00412–E; Amendment 39–22927; AD 2025–01–03]

RIN 2120–AA64

Airworthiness Directives; CFM International, S.A. Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain CFM International, S.A. (CFM) Model LEAP–1A and LEAP–1C engines. This AD was prompted by an investigation of an in-flight shut down event that revealed the aft arm of the high-pressure turbine (HPT) rotor interstage seal had failed. This AD requires removal from service and replacement of the HPT rotor interstage seal for LEAP–1A engines. Since the HPT rotor interstage seal part number is interchangeable between LEAP–1A and LEAP–1C engines, this AD also prohibits installation of these affected parts onto any LEAP–1A or LEAP–1C engine. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective March 11, 2025.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of March 11, 2025.

ADDRESSES:

AD Docket: You may examine the AD docket at *regulations.gov* under Docket No. FAA–2024–2325; 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.

Material Incorporated by Reference:

- For CFM material identified in this AD, contact CFM, GE Aviation Fleet Support, 1 Neumann Way, M/D Room 285, Cincinnati, OH 45215; phone: (877) 432–3272; email: *aviation.fleetsupport@ge.com.*
- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222–5110. It is also available at *regulations.gov* under Docket No. FAA–2024–2325.

FOR FURTHER INFORMATION CONTACT: Mehdi Lamnyi, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (781) 238–7743; email: *mehdi.lamnyi@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 CFM Model LEAP–1A and LEAP–1C engines. The NPRM published in the **Federal Register** on October 2, 2024 (89 FR 80155). The NPRM was prompted by a report of an in-flight shutdown caused by turbine blades that had broken and metal that entered the exhaust. A manufacturer investigation later revealed that the aft arm of the HPT rotor interstage seal had failed due to a non-conforming surface condition in the fillet area coupled with higher-than-expected operating stress due to friction. In the NPRM, the FAA proposed to require removal from service and replacement of the HPT rotor interstage seal. Since the HPT rotor interstage seal part number is interchangeable between LEAP–1A and LEAP–1C engines, the NPRM also proposed to prohibit installation of these affected parts onto any LEAP–1A or LEAP–1C engine. The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from Airline Pilots Association International (ALPA), StandardAero, an individual commenter, and an anonymous commenter. All commenters supported the NPRM without change.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting the AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, this AD is adopted as proposed in the NPRM.

Material Incorporated by Reference Under 1 CFR Part 51

The FAA reviewed the following CFM material:

- CFM Service Bulletin (SB) LEAP–1A–72–00–0525–01A–930A–D, Issue 002–00, dated June 28, 2024, which provides the serial numbers (S/Ns) of the affected HPT rotor interstage seals for LEAP–1A engines.
- CFM SB LEAP–1C–72–00–0124–01A–930A–D, Issue 001–00, dated September 5, 2024, which provides the S/Ns of the affected HPT rotor interstage seals that are excluded from installation onto LEAP–1C engines.

This material also includes instructions for removal and installation of the HPT rotor interstage seal. This material 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 56 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD: