



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-1311; Project Identifier MCAI-2022-00624-E; Amendment 39-22587; AD 2023-22-03]

RIN 2120-AA64

Airworthiness Directives; Safran Helicopter Engines, S.A. (Type Certificate Previously Held by Turbomeca, S.A.) Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2021-08-02 for all Safran Helicopter Engines, S.A. (Safran) (type certificate previously held by Turbomeca, S.A.) Model Arriel 2D and Arriel 2E engines. AD 2021-08-02 required replacing certain critical parts before reaching their published in-service life limits, performing scheduled maintenance tasks before reaching their published periodicity, and performing unscheduled maintenance tasks when the engine meets certain conditions. Since the FAA issued AD 2021-08-02, Safran has revised the airworthiness limitation section (ALS) of the existing maintenance and overhaul manuals, introducing new and more restrictive instructions and maintenance tasks, which prompted this AD action. This AD requires updating the ALS of the existing engine maintenance manual (EMM) or instructions for continued airworthiness (ICA) and the existing approved maintenance or inspection program, as applicable, by incorporating the actions and associated thresholds and intervals, including life limits, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is proposing 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].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1311; 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 service information identified in this final rule, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu. You may find this material on the EASA website at ad.easa.europa.eu. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1311.

- You may view this service information 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.

FOR FURTHER INFORMATION CONTACT: Kevin Clark, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (781) 238-7088; email: kevin.m.clark@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2021-08-02, Amendment 39-21496 (86 FR 26651, May 17, 2021), (AD 2021-08-02). AD 2021-08-02 applied to all Safran Model Arriel 2D and Arriel 2E engines. AD 2021-08-02 required replacing certain critical parts before reaching their published in-service life limits, performing scheduled maintenance tasks before reaching their published periodicity, and performing unscheduled maintenance tasks when the engine meets certain conditions. As a terminating action, AD 2021-08-02 required operators to revise the ALS of their existing approved aircraft maintenance program (AMP) by incorporating the revised airworthiness limitations and maintenance tasks. The FAA issued AD 2021-08-02 to prevent failure of the engine.

The NPRM published in the *Federal Register* on October 31, 2022 (87 FR 65535). The NPRM was prompted by EASA AD 2022-0083, dated May 11, 2022 (EASA AD 2022-0083), issued by EASA, which is the Technical Agent for the Member States of the European Union (referred to after this as the MCAI), which supersedes EASA AD 2018-0273, dated December 13, 2018 (EASA AD 2018-0273). The MCAI states that the manufacturer published a revised ALS introducing new and more restrictive maintenance tasks and airworthiness limitations. These new or more restrictive maintenance tasks and airworthiness limitations include initial and repetitive inspections for clogging of the power turbine air pressurization pipe.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1311.

In the NPRM, the FAA proposed to require revising the ALS of the operator's existing approved maintenance or inspection program, as applicable, to incorporate new and more restrictive airworthiness limitations.

The FAA issued a supplemental notice of proposed rulemaking (SNPRM) to amend 14 CFR part 39 to supersede AD 2021-08-02. The SNPRM published in the *Federal Register* on July 14, 2023 (88 FR 45109). The SNPRM was prompted by the FAA's determination that the NPRM contained an inaccurate reference to a certain paragraph of EASA AD 2022-0083 and that a reduced compliance time of 90 days is necessary. In the SNPRM, the FAA proposed to require revising the ALS of the existing EMM or ICA and the existing approved maintenance or inspection program, as applicable, to incorporate the actions specified in paragraph (1) of the MCAI, described previously, except as discussed under "Differences Between this AD and the MCAI." The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final Airworthiness Directive

Comments

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

Conclusion

These products have been approved by the aviation authority of another country and are 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. Except for minor editorial changes, this AD is adopted as proposed in the SNPRM.

Related Service Information under 1 CFR Part 51

The FAA reviewed EASA AD 2022-0083, which specifies instructions for accomplishing the actions specified in the applicable ALS, including performing maintenance tasks, replacing life-limited parts, and revising the existing approved AMP

by incorporating the limitations, tasks, and associated thresholds and intervals described in the ALS.

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.

Differences Between this AD and the MCAI

EASA AD 2022-0083 applies to Arriel 2D, 2E, 2H, 2L2, and 2N model turboshaft engines, whereas this AD only applies to Model Arriel 2D and Arriel 2E engines. Arriel 2H, 2L2, and 2N engines are not U.S. type certificated.

Paragraph (1) of EASA AD 2022-0083 specifies to replace each component before exceeding the applicable life limit and, within the thresholds and intervals, accomplishing all applicable maintenance tasks after its effective date. Instead, this AD requires revising the ALS of the existing EMM or ICA and the existing approved maintenance or inspection program, as applicable, by incorporating the requirements specified in paragraph (1) of EASA AD 2022-0083 within 90 days after the effective date of this AD.

Costs of Compliance

The FAA estimates that this AD affects 426 engines installed on helicopters of U.S. Registry. The FAA estimates the following costs to comply with this AD:

Action	Estimated costs			
	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Revise the ALS of the existing EMM or ICA and the operator’s existing approved maintenance or inspection program	1 work-hour x \$85 per hour = \$85	\$0	\$85	\$36,210

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 has determined that 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:

a. Removing Airworthiness Directive 2021-08-02, Amendment 39-21496 (86 FR 26651, May 17, 2021); and

b. Adding the following new airworthiness directive:

2023-22-03 Safran Helicopter Engines, S.A. (Type Certificate Previously Held by Turbomeca, S.A.): Amendment 39-22587; Docket No. FAA-2022-1311; Project Identifier MCAI-2022-00624-E.

(a) Effective Date

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

(b) Affected ADs

This AD replaces AD 2021-08-02, Amendment 39-21496 (86 FR 26651, May 17, 2021).

(c) Applicability

This AD applies to Safran Helicopter Engines, S.A. (type certificate previously

held by Turbomeca, S.A.) Model Arriel 2D and Arriel 2E engines.

(d) Subject

Joint Aircraft Service Component (JASC) Code 7250, Turbine section.

(e) Unsafe Condition

This AD was prompted by the manufacturer revising the airworthiness limitations section (ALS) of the existing engine maintenance manual (EMM) to introduce new or more restrictive tasks and limitations for certain life-limited parts. The FAA is issuing this AD to prevent failure of life-limited parts. The unsafe condition, if not addressed, could result in uncontained release of a critical part, damage to the engine, and damage to the helicopter.

(f) Compliance

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

(g) Required Actions

(1) Within 90 days after the effective date of this AD, revise the ALS of the existing EMM or instructions for continued airworthiness and the existing approved maintenance or inspection program, as applicable, by incorporating the actions specified in paragraph (1) of European Union Aviation Safety Agency (EASA) AD 2022-0083, dated May 11, 2022 (EASA AD 2022-0083).

(2) The owner/operator (pilot) holding at least a private pilot certificate may perform the action required by paragraph (g)(1) of this AD for your engine and must enter compliance with the applicable paragraphs of this AD into the engine maintenance records in accordance with 14 CFR 43.9(a) and 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(h) Provisions for Alternative Actions and Intervals

After the actions required by paragraph (g) of this AD have been done, no alternative actions and associated thresholds and intervals, including life limits, are

allowed unless they are approved as specified in the provisions of the “Ref Publication” section of EASA AD 2022-0083.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, International Validation 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 International Validation Branch, send it to the attention of the person identified in paragraph (j) of this AD and email to: ANE-AD-AMOC@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.

(j) Additional Information

For more information about this AD, contact Kevin Clark, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (781) 238-7088; email: kevin.m.clark@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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) European Union Aviation Safety Agency (EASA) AD 2022-0083, dated May 11, 2022.

(ii) [Reserved]

(3) For EASA AD 2022-0083, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu. You may find this material on the EASA website at ad.easa.europa.eu.

(4) You may view this service information at 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.

(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 October 26, 2023.

Caitlin Locke,
Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2023-25527 Filed: 11/17/2023 8:45 am; Publication Date: 11/20/2023]