



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0649; Product Identifier 2019-SW-061-AD; Amendment 39-21410; AD 2021-03-07]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.a. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Leonardo S.p.a. (Leonardo) Model AB139 and AW139 helicopters. This AD requires removing certain engine mounting rods from service and prohibits their installation on any helicopter. This AD was prompted by a report of non-conforming engine mounting rods. The actions of this AD are intended to address an 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 document listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Leonardo S.p.a. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101

Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0649.

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-2020-0649; 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 AD, the European Union Aviation Safety Agency (EASA) AD, any service information that is incorporated by reference, any comments received, and other information. The street 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: Kristi Bradley, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email kristin.bradley@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 Leonardo Model AB139 and AW139 helicopters with certain serial-numbered engine mounting rods part number (P/N) 3G7120V00132. The NPRM published in the *Federal Register* on July 9, 2020 (85 FR 41219). The NPRM proposed to require removing the affected engine mounting rods from service and proposed to prohibit installing an affected engine mounting rod on any helicopter. The proposed requirements were intended to prevent failure of an affected engine mounting rod, which could possibly result in loss of control of the helicopter.

The NPRM was prompted by EASA AD No. 2019-0149, dated June 24, 2019, issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Leonardo S.p.a. (formerly Finmeccanica S.p.A., AgustaWestland S.p.A., Agusta S.p.A.; and AgustaWestland Philadelphia Corporation, formerly Agusta Aerospace Corporation) Model AB139 and AW139 helicopters with certain serial numbered engine mounting rods P/N 3G7120V00132 installed. EASA advises of reports of a production non-conformity on a specific batch of these engine mounting rods. EASA further advises that this non-conformity degrades the material strength of the engine mounting rods.

EASA states this condition, if not corrected, could lead to failure of an affected engine mounting rod, possibly resulting in loss of control of the helicopter. Accordingly, the EASA AD requires removing from service each affected engine mounting rod, emailing a completed “Scrap Report” to Leonardo Helicopters Division, and installing a serviceable engine mounting rod. The EASA AD also prohibits installing an affected engine mounting rod on any helicopter.

Comments

The FAA gave the public the opportunity to participate in developing this final rule, but the FAA did not receive any comments on the NPRM or on the determination of the cost to the public.

FAA’s Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA’s bilateral agreement with the European Union, EASA has notified the FAA of the unsafe condition described in its AD. The FAA is issuing this AD after evaluating all of the information provided by EASA and determining the unsafe condition exists and is likely to exist or develop on other

helicopters of the same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

Differences Between this AD and the EASA AD

The EASA AD requires emailing a completed “Scrap Report” to Leonardo Helicopters Division at the same compliance time as the engine mounting rod removal, whereas this AD does not.

Related Service Information Under 1 CFR part 51

The FAA reviewed Leonardo Helicopters Alert Service Bulletin (ASB) No. 139-593, Revision A, dated June 14, 2019 (ASB 139-593, Revision A), which specifies procedures to replace the engine outboard and inboard mounting rods from the Number 1 and Number 2 engines.

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 the ADDRESSES section.

Other Related Service Information

The FAA reviewed Leonardo Helicopters ASB No. 139–593, dated June 11, 2019. This service information contains the same procedures as ASB 139-593, Revision A. However, ASB 139-593, Revision A expands the applicability from certain serial-numbered Model AB139 and AW139 helicopters to all Model AB139 and AW139 helicopters with affected engine mounting rods installed.

The FAA also reviewed Leonardo Helicopters AMP DM 39-A-71-21-05-00A-520A-B, AMP DM 39-A-71-21-05-00A-720A-B, AMP DM 39-A-71-21-06-00A-520A-B, AMP DM 39-A-71-21-06-00A-720A-B, AMP DM 39-A-71-21-07-00A-520A-B, AMP DM 39-A-71-21-07-00A-720A-B, AMP DM 39-A-71-21-08-00A-520A-B, and AMP DM 39-A-71-21-08-00A-720A-B, all dated October 4, 2019. This service information specifies instructions for removing and installing the outboard and inboard engine mounting rods.

Costs of Compliance

The FAA estimates that this AD affects up to 126 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85 per work-hour.

Replacing an engine mounting rod requires about 8 work-hours and parts cost about \$1,000 for an estimated cost of \$1,680 per engine mounting rod.

According to Leonardo Helicopter’s service information, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage by Leonardo Helicopters. Accordingly, all costs are included in this cost estimate.

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 helicopters 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:
2021-03-07 **Leonardo S.p.a.**: Amendment 39-21410; Docket No. FAA-2020-0649;
Product Identifier 2019-SW-061-AD.

(a) Applicability

This airworthiness directive (AD) applies to Leonardo S.p.a. Model AB139 and AW139 helicopters, certificated in any category, with an engine mounting rod part number (P/N) 3G7120V00132 with a serial number (S/N) listed in Figures 2 or 3 of Leonardo Helicopters Alert Service Bulletin No. 139-593, Revision A, dated June 14, 2019 (ASB 139-593), installed.

(b) Unsafe Condition

This AD defines the unsafe condition as a non-conforming engine mounting rod. This condition could result in structural failure of the engine mounting rod and subsequent loss of control of the helicopter.

(c) Effective Date

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

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

(1) Before further flight, determine the total hours time-in-service (TIS) of each engine mounting rod.

(2) Before reaching 225 total hours TIS or within 25 hours TIS, whichever occurs later, with the battery and any other electrical power supply disconnected, remove from service the engine mounting rod as follows:

(i) For the Number 1 engine outboard mounting rod, remove from service the Number 1 engine outboard mounting rod and install an airworthy Number 1 engine outboard mounting rod as shown in Detail “B” of Figure 1 of ASB 139-593 and by following the Accomplishment Instructions, paragraphs 3.1 and 3.2 of ASB 139-593, except you are not required to discard the Number 1 engine outboard mounting rod or comply with the “Scrap Report” instruction in paragraph 3.1 of ASB 139-593.

Note 1 to paragraphs (e)(2)(i) through (iv): Figure 1 of ASB 139-593 shows the engine outboard and inboard mounting rod assemblies for the left-hand side only, the right-hand side is symmetrical.

(ii) For the Number 1 engine inboard mounting rod, remove from service the Number 1 engine inboard mounting rod and install an airworthy Number 1 engine inboard mounting rod as shown in Detail “C” of Figure 1 of ASB 139-593 and by following the Accomplishment Instructions, paragraphs 3.3 and 3.4 of ASB 139-593,

except you are not required to discard the Number 1 engine inboard mounting rod or comply with the “Scrap Report” instruction in paragraph 3.3 of ASB 139-593.

(iii) For the Number 2 engine outboard mounting rod, remove from service the Number 2 engine outboard mounting rod and install an airworthy Number 2 engine outboard mounting rod as shown in Detail “B” of Figure 1 of ASB 139-593 and by following the Accomplishment instructions, paragraphs 4.1 and 4.2 of ASB 139-593, except you are not required to discard the Number 2 engine outboard mounting rod or comply with the “Scrap Report” instruction in paragraph 4.1 of ASB 139-593.

(iv) For the Number 2 engine inboard mounting rod, remove from service the Number 2 engine inboard mounting rod and install an airworthy Number 2 engine inboard mounting rod as shown in Detail “C” of Figure 1 of ASB 139-593 and by following the Accomplishment instructions, paragraphs 4.3 and 4.4 of ASB 139-593, except you are not required to discard the Number 2 engine inboard mounting rod or comply with the “Scrap Report” instruction in paragraph 4.3 of ASB 139-593.

(3) As of the effective date of this AD, do not install on any helicopter an engine mounting rod with a P/N and S/N listed in paragraph (a) of this AD.

(f) Credit for Previous Actions

Actions accomplished before the effective date of this AD in accordance with the procedures specified in Leonardo Helicopters Alert Service Bulletin No. 139-593, dated June 11, 2019, are considered acceptable for compliance with the corresponding actions specified in paragraphs (e)(1) and (2) of this AD.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Kristi Bradley, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 10101 Hillwood

Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email 9-AVS-AIR-730-AMOC@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, the FAA suggests that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(h) Additional Information

(1) Leonardo Helicopters Alert Service Bulletin No. 139-593, dated June 11, 2019, and Leonardo Helicopters AMP DM 39-A-71-21-05-00A-520A-B, AMP DM 39-A-71-21-05-00A-720A-B, AMP DM 39-A-71-21-06-00A-520A-B, AMP DM 39-A-71-21-06-00A-720A-B, AMP DM 39-A-71-21-07-00A-520A-B, AMP DM 39-A-71-21-07-00A-720A-B, AMP DM 39-A-71-21-08-00A-520A-B, and AMP DM 39-A-71-21-08-00A-720A-B, all dated October 4, 2019, which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact Leonardo S.p.a. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>. You may view a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177.

(2) The subject of this AD is addressed in European Union Aviation Safety Agency (EASA) AD No. 2019-0149, dated June 24, 2019. You may view the EASA AD on the Internet at <https://www.regulations.gov> in Docket No. FAA-2020-0649.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 7120, Engine Mount Section.

(j) 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) Leonardo Helicopters Alert Service Bulletin No. 139-593, Revision A, dated June 14, 2019.

(ii) [Reserved]

(3) For service information identified in this AD, contact Leonardo S.p.a. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110.

(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, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on January 27, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-03660 Filed: 2/24/2021 8:45 am; Publication Date: 2/25/2021]