DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-1003; Product Identifier 2018-SW-086-AD; Amendment 39-21294; AD 2020-21-21]

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 Leonardo S.p.a. (Leonardo) Model A109E, A109S, A119, AW109SP, and AW119MKII helicopters. This AD requires removing certain main rotor (M/R) floating ring assemblies from service. This AD also prohibits replacing any washer on any M/R floating ring assembly. This AD was prompted by a report of a washer debonding from the M/R floating ring assembly. 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].

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.

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-2019-1003; 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 Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, 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: Kristin Bradley, Aerospace 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 A109E, A109S, A119, AW109SP, and AW119MKII helicopters, with a M/R floating ring assembly part number (P/N) 109-0111-09-101 or P/N 109-0111-09-103 installed. The NPRM published in the Federal Register on December 9, 2019 (84 FR 67251). The NPRM proposed to require removing from service any M/R floating ring assembly P/N 109-0111-09-101 or P/N

The NPRM also proposed to prohibit installing the affected M/R floating ring assemblies on any helicopter. Lastly, the NPRM proposed to prohibit replacing any washer P/N 109-0111-23-101 on any M/R floating ring assembly installed on any helicopter. The proposed requirements were intended to prevent failure of the M/R floating ring assembly and significant increase of the pilot workload and subsequent loss of control of the helicopter.

The NPRM was prompted by EASA AD No. 2018-0205, dated September 14, 2018, 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 A109E, A109S, A119, A109LUH, AW109SP, and AW119MKII helicopters with certain part-numbered M/R floating ring assemblies installed. EASA advises of a report of a washer P/N 109-0111-23-101 that debonded from the M/R floating ring assembly on a Model A109E helicopter. Investigation results revealed that the M/R floating ring assembly had been improperly repaired, and identified a batch of M/R floating ring assemblies that could also be affected. Due to design similarity, some of those M/R floating ring assemblies may be installed on other A109/A119 helicopter models.

EASA further advises that this condition, if not detected and corrected, could lead to failure of an affected M/R floating ring assembly and significant increase of the pilot workload, possibly resulting in reduced control of the helicopter. Accordingly, the EASA
AD requires inspecting the M/R floating ring assembly to identify its S/N and depending on findings, replacing affected serial-numbered M/R floating ring assemblies. The EASA AD also prohibits installing those serial-numbered M/R floating ring assemblies on any helicopter and prohibits replacing washer P/N 109-0111-23-101 on an M/R floating ring assembly installed on a 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 these 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 applies to Model A109LUH helicopters, whereas this AD does not because that model is not FAA type-certificated.

**Related Service Information**

helicopters; ASB No. 109SP-125 for Model AW109SP helicopters; and ASB No. 119-092 for Model A119 and AW119MKII helicopters, all Revision A and dated September 13, 2018. This service information contains procedures to identify the S/N of the M/R floating ring assembly and provides instructions for replacing the floating ring assembly if necessary. This service information also specifies replacing certain serial-numbered M/R floating ring assemblies and reporting certain information to Leonardo Helicopters.

**Costs of Compliance**

The FAA estimates that this AD affects 210 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.

Inspecting the M/R floating ring assembly takes about 1 work-hour for an estimated cost of $85 per helicopter and $17,850 for the U.S. fleet. Replacing an M/R floating ring assembly takes about 8 work-hours and parts cost about $5,500 for an estimated cost of $6,180 per floating ring assembly.

According to Leonardo Helicopters, 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, the FAA has included all costs in the 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:

Product Identifier 2018-SW-086-AD.

(a) Applicability

This airworthiness directive (AD) applies to Leonardo S.p.a. Model A109E, A109S, A119, AW109SP, and AW119MKII helicopters, certificated in any category, with a main rotor (M/R) floating ring assembly part number (P/N) 109-0111-09-101 or P/N 109-0111-09-103 installed.

(b) Unsafe Condition

This AD defines the unsafe condition as disbonding of the washer from the M/R floating ring assembly. This condition could result in a significant increase of pilot workload 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


(2) After the effective date of this AD:


(f) Special Flight Permits

Special flight permits are prohibited.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Kristin Bradley, Aerospace Engineer, General
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.

**Additional Information**


Subject

Joint Aircraft Service Component (JASC) Code: 6220, Main Rotor Head.

Issued on October 8, 2020.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.
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