



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0204; Product Identifier 2018-SW-082-AD; Amendment 39-21179; AD 2020-15-16]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.A (type certificate previously held by Agusta S.p.A) Helicopters

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2018-07-08, which applied to certain Leonardo S.p.A (type certificate previously held by Agusta S.p.A) Model A109E, A109K2, A109S, AW109SP, A119, and AW119 MKII helicopters. AD 2018-07-08 required reducing the life limit of the tail rotor blade retention bolt and an inspection of that bolt for cracking, and replacement of any cracked bolt. This AD continues to require reducing the life limit of the tail rotor blade retention bolt, inspecting that bolt for cracking, and replacing any cracked bolt. In addition, this AD requires repetitive inspections of the tail rotor blade retention bolt for cracking. The FAA is issuing 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 certain publications listed in this AD as of April 26, 2018 (83 FR 15495, April 11, 2018).

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 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. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0204.

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-2020-0204; 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.

FOR FURTHER INFORMATION CONTACT: Matt Fuller, AD Program Manager, Continued Operational Safety Branch, Airworthiness Products Section, General Aviation and Rotorcraft Unit, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5151; email matthew.fuller@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2018-07-08, Amendment 39-19239 (83 FR 15495, April 11, 2018) (“AD 2018-07-08”). AD 2018-07-08 applied to certain Leonardo S.p.A Model A109E, A109K2, A109S, AW109SP, A119, and AW119 MKII helicopters. The NPRM published in the *Federal Register* on March 23, 2020 (85 FR 16281). The NPRM was prompted by the FAA’s determination that repetitive inspections of the tail rotor blade retention bolt are needed to address the unsafe condition. The NPRM proposed to continue to require reducing the life limit of the tail rotor blade retention bolt, inspecting that bolt for cracking, and replacing any cracked bolt. The NPRM also proposed to require repetitive inspections of the tail rotor blade retention bolt for cracking. Since issuing AD 2018-07-08, the FAA has determined that repetitive inspections of the tail rotor blade retention bolt are needed to address the unsafe condition. The FAA is issuing this AD to address cracked bolts, which could result in failure of the tail rotor and loss of control of the helicopter.

The European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Emergency AD, 2016-0173-E, dated August 24, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Leonardo S.p.A. Model A109E, A109K2, A109LUH, A109S, A119, AW109SP and AW119 MKII helicopters. You may examine the MCAI in

the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0204.

See the MCAI for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes.

The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR Part 51

This AD requires the following service information, which the Director of the Federal Register approved for incorporation by reference as of April 26, 2018 (83 FR 15495, April 11, 2018).

- Leonardo Helicopters Mandatory Bollettino Tecnico No. 109EP-149, dated August 19, 2016.

- Leonardo Helicopters Mandatory Bollettino Tecnico No. 109K-72, dated August 19, 2016.

- Leonardo Helicopters Mandatory Bollettino Tecnico No. 109S-072, dated August 19, 2016.

- Leonardo Helicopters Mandatory Bollettino Tecnico No. 109SP-105, dated August 19, 2016.

- Leonardo Helicopters Mandatory Bollettino Tecnico No. 119-080, dated August 19, 2016.

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.

Differences Between this AD and the MCAI or Service Information

The MCAI does not specify life limits for a tail rotor blade retention bolt having part number (P/N) 709-0160-57-101 that has been interchanged between model helicopter installations, while this AD does.

The MCAI applies to Model A109LUH helicopters. Model A109LUH helicopters are not certified by the FAA and are not included on the U.S. type certificate data sheet; this AD therefore does not include those helicopters in the applicability.

Interim Action

The FAA considers this AD to be an interim action. The design approval holder is currently developing a modification that will address the unsafe condition identified in this AD. Once this modification is developed, approved, and available, the FAA might consider additional rulemaking.

Costs of Compliance

The FAA estimates that this AD affects 219 helicopters 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
Retained actions from AD 2018-07-08	4 work-hours X \$85 per hour = \$340	\$0	\$340	\$74,460
New actions	4 work-hours X \$85 per hour = \$340	\$0	\$340	\$74,460

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
2 work-hour X \$85 per hour = \$170	\$500	\$670

According to the manufacturer, some or all 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 for affected individuals. As a result, the FAA has included all known 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 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.

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:

a. Removing Airworthiness Directive (AD) 2018-07-08, Amendment 39-19239 (83 FR 15495, April 11, 2018); and

b. Adding the following new AD:

2020-15-16 Leonardo S.p.A. (type certificate previously held by Agusta S.p.A.):

Amendment 39-21179; Docket No. FAA-2020-0204; Product Identifier 2018-SW-082-AD.

(a) Effective Date

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

(b) Affected ADs

This AD replaces AD 2018-07-08, Amendment 39-19239 (83 FR 15495, April 11, 2018).

(c) Applicability

This AD applies to Leonardo S.p.A. (type certificate previously held by Agusta S.p.A.) Model A109E, A109K2, A109S, AW109SP, A119, and AW119 MKII

helicopters, certificated in any category, with a tail rotor blade retention bolt (bolt) having part number (P/N) 709-0160-57-101 installed.

(d) Subject

Joint Aircraft Service Component (JASC) Code 6500, Tail Rotor Drive System.

(e) Reason

This AD was prompted by the discovery of a cracked bolt, and a determination that repetitive inspections of the bolt are needed to address the unsafe condition. The FAA is issuing this AD to address cracked bolts, which could result in failure of the tail rotor and loss of control of the helicopter.

(f) Compliance

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

(g) Required Actions

(1) Before further flight:

(i) For Model A109E and A109K2 helicopters, remove from service any bolt having P/N 709-0160-57-101 that has 800 or more hours time-in-service (TIS). If the hours TIS is unknown, remove the bolt from service. Thereafter, remove from service any bolt having P/N 709-0160-57-101 before accumulating 800 hours TIS.

(ii) For Model A109S, AW109SP, A119, and AW119 MKII helicopters, remove from service any bolt having P/N 709-0160-57-101 that has 3,200 or more landings. If the number of landings is unknown, remove the bolt from service. Thereafter, remove from service any bolt having P/N 709-0160-57-101 before accumulating 3,200 landings. For purposes of this AD, a landing is counted anytime a helicopter lifts off into the air

and then lands again regardless of the duration of the landing and regardless of whether the engine is shutdown.

(iii) Remove from service any bolt having P/N 709-0160-57-101 that has 800 or more hours TIS, or 3,200 or more landings, that has been interchanged between different model helicopters listed in paragraphs (g)(1)(i) and (ii) of this AD. If the hours TIS or number of landings is unknown, remove the bolt from service. Thereafter, remove from service any bolt having P/N 709-0160-57-101 that has been interchanged between different model helicopters listed in paragraphs (g)(1)(i) and (ii) of this AD before accumulating 800 hours TIS or 3,200 landings, whichever occurs first.

(2) Within 25 hours TIS after the effective date of this AD, and thereafter at intervals not to exceed 200 hours TIS, remove each bolt having P/N 709-0160-57-101. Prior to cleaning, using a 10X or higher power magnifying glass, inspect each bolt having P/N 709-0160-57-101 for any crack in the area depicted in Figure 1 of Leonardo Helicopters Mandatory Bollettino Tecnico No. 109EP-149, 109K-72, 109S-072, 109SP-105, or 119-080, all dated August 19, 2016, as applicable to your model helicopter.

(i) If there is any crack, replace the bolt with an airworthy bolt before further flight.

(ii) If there are no cracks, before further flight, clean and degrease the inspection area of the bolt with solvent, and using a 10X or higher power magnifying glass, inspect each bolt having P/N 709-0160-57-101 for any crack in the area depicted in Figure 1 of Leonardo Helicopters Mandatory Bollettino Tecnico No. 109EP-149, 109K-72, 109S-072, 109SP-105, or 119-080, all dated August 19, 2016, as applicable to your

model helicopter. If there is any crack, replace the bolt with an airworthy bolt before further flight.

(3) As of the effective date of this AD, installation of a bolt having P/N 709-0160-57-101 is allowed, provided that the bolt has passed an inspection as required by paragraph (g)(2) of this AD.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, AD Program Manager, Continued Operational Safety Branch, Airworthiness Products Section, General Aviation and Rotorcraft Unit, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5151; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, 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.

(i) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) Emergency AD 2016-0173-E, dated August 24, 2016. This EASA AD may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0204.

(2) For more information about this AD, contact Matt Fuller, AD Program Manager, Continued Operational Safety Branch, Airworthiness Products Section, General

Aviation and Rotorcraft Unit, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5151; email matthew.fuller@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) 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 this AD specifies otherwise.

(3) The following service information was approved for IBR on April 26, 2018 (83 FR 15495, April 11, 2018).

(i) Leonardo Helicopters Mandatory Bollettino Tecnico No. 109EP-149, dated August 19, 2016.

(ii) Leonardo Helicopters Mandatory Bollettino Tecnico No. 109K-72, dated August 19, 2016.

(iii) Leonardo Helicopters Mandatory Bollettino Tecnico No. 109S-072, dated August 19, 2016.

(iv) Leonardo Helicopters Mandatory Bollettino Tecnico No. 109SP-105, dated August 19, 2016.

(v) Leonardo Helicopters Mandatory Bollettino Tecnico No. 119-080, dated August 19, 2016.

(4) For service information identified in this AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-

0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>.

(5) 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.

(6) 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 July 16, 2020.

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

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