DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0150; Product Identifier 2019-SW-063-AD; Amendment 39-21028; AD 2020-03-13]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.A. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Leonardo S.p.A. Model AW189 helicopters. This AD requires inspecting the hydraulic fluid level on each tail rotor (T/R) damper and depending on the inspection results, removing the T/R damper from service and reporting information or repetitively inspecting the T/R damper. This AD is prompted by reports of major leakage of hydraulic fluid in T/R dampers. This condition could result in degradation of T/R damper performance; multiple leaking T/R dampers could result in T/R damage and subsequent loss control of the helicopter. The actions of this AD are intended to address an unsafe condition on these products.

DATES: This AD becomes effective [INSERT DATE 15 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 15 DAYS AFTER DATE OF
The FAA must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- **Federal eRulemaking Docket:** Go to https://www.regulations.gov. Follow the online instructions for sending your comments electronically.

- **Fax:** 202-493-2251.

- **Mail:** Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.

- **Hand Delivery:** Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**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-2020-0150; 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 (EASA) AD, any service information that is incorporated by reference, the economic evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

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 review 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-2020-0150.

FOR FURTHER INFORMATION CONTACT: Kristi Bradley, Aerospace Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email kristin.bradley@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and the FAA did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, the FAA invites you to participate in this rulemaking by submitting written comments, data, or views. The FAA also invites comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. The FAA will file in the docket all comments received, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. The FAA will consider all the comments received and may conduct additional rulemaking based on those comments.
Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2019-0160, dated July 5, 2019, to correct an unsafe condition for Leonardo S.p.A. Model AW189 helicopters, with T/R damper part number (P/N) 4F640V00254 with a serial number (S/N) up to LK1229 inclusive. The EASA AD excludes any T/R damper that is marked with “R” on its S/N and any T/R damper that has accumulated 150 flight hours or more since installation on a helicopter and that has been continuously installed for 12 months or more. EASA advises that occurrences were reported of leakage of the T/R damper hydraulic fluid. EASA advises that the T/R damper hydraulic fluid leakage occurred on newly installed T/R dampers and those that had accumulated less than 150 flight hours. Therefore, the EASA AD requires repetitive visual inspections of the hydraulic fluid level of each T/R damper at intervals not to exceed 10 flight hours until the T/R damper accumulates 150 flight hours since first installation and 10 months after the effective date of the EASA AD. The EASA AD also provides a terminating action and requires a ground run following installation of an affected T/R damper. Additionally, depending on the inspection results, the EASA AD requires replacement of the affected part with a serviceable part, returning T/R dampers for re-work and re-identification, and emailing information and pictures to Leonardo Helicopter Division.

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 about the unsafe condition described in its AD. The FAA is
issuing this AD after evaluating all known relevant information and determining that an unsafe condition is likely to exist or develop on other helicopters of the same type design.

**Related Service Information Under 1 CFR part 51**

Leonardo Helicopters has issued Emergency Alert Service Bulletin (ASB) No. 189-226, dated July 5, 2019. The ASB specifies visually checking for excess hydraulic fluid in each T/R damper and defines the replacement and reporting criteria. The ASB also specifies performing a ground run and subsequent visual check immediately after installing any affected T/R damper on a helicopter.

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.

**AD Requirements**

This AD requires, within 10 hours time-in-service (TIS) inspecting the hydraulic fluid level of each affected T/R damper and repeating the inspection at intervals not to exceed 10 hours TIS until the T/R damper accumulates 150 total hours TIS and has been installed for 12 or more consecutive months. Depending on the hydraulic fluid level, this AD requires removing from service the affected T/R damper and emailing photographs of the sight window showing the hydraulic fluid level and certain information to Leonardo S.p.A Helicopters.

After the effective date of this AD, following installation of an affected T/R damper, this AD requires performing a ground run for at least 30 minutes, inspecting the hydraulic fluid level, and repeating the hydraulic fluid level inspection at intervals not to exceed 10 hours TIS until the T/R damper accumulates 150 total hours TIS and has been
installed for 12 consecutive months.

**Differences between this AD and the EASA AD**

The EASA AD requires returning removed parts to Leonardo Helicopter Division, while this AD does not. Following installation of an affected T/R damper, the EASA AD requires repeating the hydraulic fluid level inspection until the T/R damper accumulates 150 total hours TIS, has been installed for 12 consecutive months, and has been installed for 10 months after the effective date of the EASA AD. This AD requires repeating the hydraulic fluid level inspection until the T/R damper accumulates 150 total hours TIS and has been installed for 12 consecutive months instead.

**Regulatory Flexibility Act**

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

**Costs of Compliance**

The FAA estimates that this AD affects 4 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.

Visually inspecting the hydraulic fluid level on all four T/R dampers requires about 1 work-hour for an estimated cost of $85 per helicopter and $340 for the U.S. fleet per inspection cycle.

If required, replacing a T/R damper requires about 2 work-hours and parts cost about $7,170 for an estimated cost of $7,340 per T/R damper.
Reporting information requires about 1 work-hour for an estimated cost of $85 per helicopter.

**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 be 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.

**FAA’s Justification and Determination of the Effective Date**

Section 553(b)(3)(B) of the Administrative Procedure Act (5 U.S.C.) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without seeking comment prior to the rulemaking.
An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because some of the corrective actions are required within 10 hours TIS. Therefore, notice and opportunity for prior public comment are impracticable and contrary to public interest pursuant to 5 U.S.C. 553(b)(3)(B). In addition, for the reasons stated above, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days.

**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 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, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866, and
2. Will not affect intrastate aviation in Alaska.

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 (AD):

Product Identifier 2019-SW-063-AD.

(a) Applicability

This AD applies to Leonardo S.p.A. Model AW189 helicopters, certificated in any category, with a tail rotor (T/R) damper part number (P/N) 4F6420V00254 with a serial number (S/N) up to LK1229 inclusive, installed, except:

(1) Any T/R damper marked with a final dash “R” on the S/N, or
(2) Any T/R damper that has accumulated 150 or more total hours time-in-service (TIS) and has been installed for 12 or more consecutive months.

(b) Unsafe Condition

This AD defines the unsafe condition as leaking T/R damper hydraulic fluid. This condition could result in degradation of T/R damper performance. Multiple leaking T/R dampers could cause T/R damage and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective [INSERT DATE 15 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) Within 10 hours TIS, inspect each T/R damper as follows: With the T/R damper in the upper position and the sight window downward at a 45-degree angle, inspect the hydraulic fluid level through the sight window using a T/R damper inspection tool.

   (i) If the fluid level is over the pointing line in the red zone, before further flight, remove from service the T/R damper.

   (ii) If the fluid level is under the pointing line in the white zone, repeat the inspection per paragraph (e)(1) at intervals not to exceed 10 hours TIS.

(2) Within 10 days after removing any T/R damper from service, as required by paragraph (e)(1)(i) of this AD, send photos of the sight window showing the hydraulic
fluid level and a completed Table 1 of Leonardo Helicopters Emergency Alert Service Bulletin No. 189-226, dated July 5, 2019 to pse_aw189.mbx.aw@leonardocompany.com.

(3) For each T/R damper with less than 150 total hours TIS and that has been installed for less than 12 consecutive months, repeat the actions required by paragraph (e)(1) of this AD within every 10 hours TIS until the T/R damper reaches 150 total hours TIS and has been installed for 12 or more consecutive months.

(4) For each T/R damper with less than 150 total hours TIS and that has been installed for 12 or more consecutive months, repeat the actions required by paragraph (e)(1) of this AD within every 10 hours TIS until the T/R damper reaches 150 total hours TIS.

(5) For each T/R damper with 150 or more total hours TIS and that has been installed for less than 12 consecutive months, repeat the actions required by paragraph (e)(1) of this AD until the T/R damper has been installed for 12 consecutive months.

(6) After the effective date of this AD, do not install a T/R damper P/N 4F6420V00254 with S/N up to LK1229 inclusive on any helicopter, unless you have performed a ground run for at least 30 minutes and perform the actions required by paragraph (e)(1) of this AD.

(7) Repeating the inspection until the T/R damper reaches 150 total hours TIS and has been installed for 12 consecutive months constitutes a terminating action for the repetitive inspection required by paragraphs (e)(1) through (5) of this AD.

(f) Paperwork Reduction Act Burden Statement

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 be 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.

(g) **Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Kristi Bradley, Aerospace Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; 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, 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) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2019-0160, dated July 5, 2019. You may view the EASA AD on the Internet at https://www.regulations.gov by searching for and locating it in Docket No. FAA-2020-0150.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6400, Tail Rotor System.

(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.


(ii) [Reserved]


(4) You may view this service information at 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 in Fort Worth, Texas, on February 13, 2020.

Lance T. Gant,

Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2020-03840 Filed: 2/25/2020 8:45 am; Publication Date: 2/26/2020]