



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2019-0813; Product Identifier 2019-SW-006-AD; Amendment 39-19787; AD 2019-22-08]**

**RIN 2120-AA64**

**Airworthiness Directives; Leonardo S.p.A. Helicopters**

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

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for Leonardo S.p.A. Model AW169 and AW189 helicopters. This AD requires inspecting certain part-numbered and serial-numbered tail rotor (T/R) actuators, reporting information, and depending on the inspection outcome, marking a part, performing an additional inspection, and removing the T/R actuator from service. This AD also prohibits the installation of affected T/R actuators. This AD is prompted by reports of incorrect installations of the T/R actuator back-end input lever. 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 PUBLICATION IN THE FEDERAL REGISTER].

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-2019-0813; 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 Leonardo Helicopters 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>.

For UTC Aerospace Systems service information identified in this final rule, contact Collins Aerospace (previously UTC Aerospace Systems); telephone 1-877-808-7575; fax 1-860-660-0372; email [tech.solutions@hs.utc.com](mailto:tech.solutions@hs.utc.com); or at <https://utcaerospacesystems.com/aftermarket-services/technical-support/>.

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-2019-0813.

**FOR FURTHER INFORMATION CONTACT:** David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email [david.hatfield@faa.gov](mailto:david.hatfield@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. 2019-0019, dated January 30, 2019 (EASA AD 2019-0019) to correct an unsafe condition for Leonardo S.p.A. (formerly Finmeccanica S.p.A., AgustaWestland S.p.A.) Model AW169 and AW189 helicopters with T/R actuator part number (P/N) 6F6730V00331 and a serial number (S/N) up to 489 inclusive, except those marked with “SB 67-0007,” installed. EASA advises of reports of non-conformities of the T/R actuator back-end input lever, indicating incorrect orientation of the lever with its trunnion locking pin.

EASA states this condition could lead to de-bonding and slippage of one of the two redundant lever bearings and possibly affect the functionality of the T/R actuator. A batch of T/R actuators was identified that may be also affected. Accordingly, EASA AD 2019-0019 requires one-time conformity checks of certain T/R actuator input levers, sending information and photos to Leonardo S.p.A., and depending on inspection findings, marking a part, inspecting the bonding of each bearing, and replacing the T/R actuator. EASA AD 2019-0019 also prohibits installation of the affected parts.

## **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 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.

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

UTC Aerospace Systems (Collins Aerospace) has issued Service Bulletin 67-0007, Basic Issue, dated January 17, 2019 (SB 67-0007). SB 67-0007 specifies verifying that the width of the bearing circular collar of the input lever is within the allowable limits of 4 +/- 0.3 mm, and checking the input lever pin head, and the nut and cotter pin of the intermediate bolt for proper installation. Depending on the inspection results, SB 67-0007 specifies replacing the T/R actuator, or marking the input lever and sending its completed registration form and photos of each side of the input lever to Leonardo Helicopters. SB 67-0007 is incorporated by reference in this AD.

SB 67-0007 is attached as Annex A to Leonardo Helicopters Alert Service Bulletin (ASB) No. 169-129, dated January 30, 2019 (ASB 169-129), for Model AW169 helicopters, and Leonardo Helicopters ASB No. 189-220, dated January 30, 2019 (ASB 189-220), for Model AW189 helicopters. ASB 169-129 and ASB 189-220 are not incorporated by reference in this AD.

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**

Leonardo Helicopters has issued ASB 169-129 and ASB 189-220. This service information refers to SB 67-0007 for instructions to inspect certain part-numbered and serial-numbered T/R actuator input lever assemblies. Depending on findings, this service information specifies marking the input lever, inspecting the bonding of each bearing, and replacing the T/R actuator on a specified compliance time schedule based on findings. This service information also specifies sending information, photos, and certain T/R actuators to Leonardo Helicopters.

### **AD Requirements**

For Model AW169 and AW189 helicopters with a T/R actuator P/N 6F6730V00331 and an S/N up to 489 inclusive, except those marked with “SB 67-0007,” installed, this AD requires inspecting the T/R actuator input lever assembly by determining if the width of the bearing circular collar of the input lever is within allowable limits, and inspecting for proper installation of the pin and of the intermediate bolt’s nut and cotter pin. This AD requires reporting certain information and photos to Leonardo S.p.A. Based on the inspection outcome, this AD requires marking “SB 67-0007” on the input lever, inspecting each bearing for correct bonding, and removing the T/R actuator from service at different compliance times. This AD also prohibits installation of affected T/R actuators.

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

The EASA AD requires returning a removed T/R actuator to Leonardo

Helicopters, whereas this AD does not. Depending on the inspection results of the T/R actuator input lever assembly, one of the compliance times to replace the T/R actuator in the EASA AD is 200 hours TIS or 2 months, whichever occurs first. This AD requires removing the T/R actuator from service within 60 hours TIS for the same inspection results instead.

### **Costs of Compliance**

The FAA estimates that this AD affects 10 helicopters of U.S. Registry. Labor costs are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs in order to comply with this AD.

Inspecting the T/R actuator input lever assembly takes about 1 work-hour, and reporting information and photos to Leonardo S.p.A. takes about 1 work-hour, for an estimated cost of \$170 per helicopter and \$1,700 for the U.S. fleet. Marking a part takes a minimal amount of time for a nominal cost. Replacing a T/R actuator takes about 6 work-hours and parts cost about \$20,000, for an estimated cost of \$20,510 per helicopter.

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, the FAA has included all costs in the cost estimate.

### **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.

**Justification for Immediate Adoption and Determination of the Effective Date**

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (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 foregoing notice and comment prior to adoption of this rule because the initial inspection requirements must be completed within 30 hours time-in-service. 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 reason 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.

The FAA prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

## **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 adding the following new airworthiness directive (AD):

2019-22-08 **Leonardo S.p.A.:** Amendment 39-19787; Docket No. FAA-2019-0813; Product Identifier 2019-SW-006-AD.

#### **(a) Applicability**

This AD applies to Leonardo S.p.A. Model AW169 and AW189 helicopters, certificated in any category, with a tail rotor (T/R) actuator part number (P/N) 6F6730V00331 with a serial number (S/N) up to 489 inclusive, except those marked with “SB 67-0007.”

#### **(b) Unsafe Condition**

This AD defines the unsafe condition as incorrect installation of the T/R actuator back-end input lever. This condition could result in de-bonding and slippage of one or both of the two redundant lever bearings, a reduction or loss of T/R control, 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 30 hours time-in-service (TIS), for Model AW169 helicopters, with access panels 470AT and 470BT removed; and for Model AW189 helicopters, with access panels 496A and 495A removed, inspect the T/R actuator input lever assembly by following the Accomplishment Instructions, paragraph 3.B. through 3.C.4., of UTC Aerospace Systems Service Bulletin 67-0007, Basic Issue, dated January 17, 2019 (SB 67-0007).

(i) Report the information requested in the form at the end of SB 67-0007, along with a photo of each side of the installed T/R actuator back-end input lever, by email to: pse\_aw189.mbx.aw@leonardocompany.com. Refer to Figure 4 and Figure 5 of SB 67-0007 for an example of each photo.

(ii) If the width of the bearing circular collar of the input lever is within the allowable limits of 4 +/- 0.3 mm, the input lever pin head is not on side "A" of the T/R actuator as shown in Figure 2b of SB 67-0007 (the input lever pin head is on side "B"), and the nut and cotter pin of the intermediate bolt are installed on side "A" of the T/R actuator side as shown in Figure 3 of SB 67-0007, before further flight, mark "SB 67-0007" on the input lever with permanent ink as shown in Figure 4 of SB 67-0007.

(iii) If the width of the bearing circular collar of the input lever is outside the allowable limits of 4 +/- 0.3 mm, the input lever pin head is on side “A” of the T/R actuator, or the nut and cotter pin of the intermediate bolt are not installed on side “A” of the T/R actuator side, before further flight, use Table 1 to paragraph (e)(1)(iii) of this AD for next instruction.

Circular collar width of the input lever is within the allowable limits of 4 +/- 0.3 mm.	The input lever pin head is not on side “A” of the T/R actuator (the input lever pin head is on side “B”).	The nut and cotter pin of the intermediate bolt are installed on side “A” of the T/R actuator.	Instruction:
Yes	Yes	No	Proceed to paragraph (e)(1)(v) of this AD
No	No	Yes	Proceed to paragraph (e)(1)(v) of this AD
No	No	No	Proceed to paragraph (e)(1)(v) of this AD
Yes	No	No	Proceed to paragraph (e)(1)(iv) of this AD
Yes	No	Yes	Proceed to paragraph (e)(1)(iv) of this AD
No	Yes	Yes	Proceed to paragraph (e)(1)(iv) of this AD
No	Yes	No	Proceed to paragraph (e)(1)(iv) of this AD

Table 1 to Paragraph (e)(1)(iii)

(iv) Before further flight, inspect for correct bonding (no axial or rotational relative movement compared to the lever) of each bearing by moving the input lever along the pin axial direction.

(A) If there is no axial or rotational relative movement compared to the lever in both bearings, within 10 hours TIS after completing the inspections required by paragraph (e)(1) of this AD, remove from service the T/R actuator.

(B) If there is axial or rotational relative movement compared to the lever in one or both bearings, before further flight, remove from service the T/R actuator.

(v) Within 60 hours TIS after completing the inspections required by paragraph (e)(1) of this AD, remove from service the T/R actuator.

(2) After the effective date of this AD, do not install a T/R actuator P/N 6F6730V00331 with an S/N up to 489 inclusive, except those marked with “SB 67-0007,” on any helicopter.

**(f) Special Flight Permits**

Special flight permits are prohibited.

**(g) 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.

**(h) 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 David Hatfield, Aviation Safety 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.

**(i) Additional Information**

(1) Leonardo Helicopters Alert Service Bulletin (ASB) No. 169-129 and Leonardo Helicopters ASB No. 189-220, both dated January 30, 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 review 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 Aviation Safety Agency (EASA) AD No. 2019-0019, dated January 30, 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-2019-0813.

**(j) Subject**

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

**(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) UTC Aerospace Systems (Collins Aerospace) Service Bulletin No. 67-0007, Basic Issue, dated January 17, 2019.

Note 1 to paragraph (k)(2)(i): UTC Aerospace Systems (Collins Aerospace) Service Bulletin No. 67-0007, Basic Issue, dated January 17, 2019, is attached as Annex A to Leonardo Helicopters ASB No. 169-129 and Leonardo Helicopters ASB No. 189-220, both dated January 30, 2019, which are not incorporated by reference in this AD.

(ii) [Reserved]

(3) For UTC Aerospace Systems service information identified in this AD, contact Collins Aerospace (previously UTC Aerospace Systems); telephone 1-877-808-7575; fax 1-860-660-0372; email [tech.solutions@hs.utc.com](mailto:tech.solutions@hs.utc.com); or at <https://utcaerospacesystems.com/aftermarket-services/technical-support/>.

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

Issued in Fort Worth, Texas, on November 20, 2019.

Lance T. Gant,

Director, Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2019-27633 Filed: 12/20/2019 8:45 am; Publication Date: 12/23/2019]