DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0856; Product Identifier 2019-SW-071-AD; Amendment 39-21270; AD 2020-20-14]

RIN 2120-AA64

Airworthiness Directives; Airbus 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 certain Airbus Helicopters Model SA-365N, SA-365N1, AS-365N2, AS 365 N3, EC 155B, EC155B1, AS350B3, AS355F, AS355F1, AS355F2, AS355N, AS355NP, EC130B4, and EC130T2 helicopters. This AD requires inspecting the main rotor (M/R) servo actuators, and depending on the inspection results, replacing the affected part, applying a slippage mark, and reporting information. This AD was prompted by an incident of a sudden, strong nose-up attitude followed by intensive vibrations and increased loads on the flight controls during a cruise flight. 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
certain documents 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 45 DAYS
AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESS: 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-2020-0856; 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 listed above.
Comments will be available in the AD docket shortly after receipt.

For service information identified in this final rule, 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. 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-2020-0856.

FOR FURTHER INFORMATION CONTACT: Matthew L. Thompson, Aerospace Engineer, DSCO Branch, Compliance & Airworthiness Division, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone 817-222-5251; email matthew.l.thompson@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 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.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, 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.

Confidential Business Information

Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this final rule contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this final rule, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this final rule. Submissions containing CBI should be sent to Matthew L. Thompson, Aerospace Engineer, DSCO Branch, Compliance & Airworthiness Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5251; email matthew.l.thompson@faa.gov. Any comments that the FAA receives which are not specifically designated as CBI will be placed in the public docket for this rulemaking.

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2019-0184, dated July 29, 2019, to correct an unsafe condition for Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France, Aerospatiale, Sud Aviation, Model SA 365 N, SA 365 N1, AS 365 N2, AS 365 N3, EC155 B and EC155 B1 helicopters, AS 350 B3 helicopters if equipped with dual
hydraulic system (OP 3346 or OP 3082), EC 130 B4 and EC 130 T2 helicopters, and AS355 F, AS355 F1, AS355 F2, AS355 N and AS355 NP helicopters. EASA advises that a Model AS 365 N3 helicopter experienced a sudden, strong nose-up attitude followed by intense vibrations and increased loads on the flight controls during a cruise flight. Following an emergency landing, the post-flight visual inspection of the front left-hand M/R servo actuator showed that the threaded-shouldered bushing holding the lower end-fitting was uncoupled from the actuator body. EASA further advises that other helicopter models are affected due design similarity of the installed M/R servo actuators. EASA also advises that this condition, if not detected and corrected, could lead to loss of control of the helicopter.

Accordingly, the EASA AD requires a one-time inspection of each M/R servo actuator for correct installation and, depending on the findings, replacing the affected part or applying a slippage mark. The EASA AD also requires inspecting the slippage mark for misalignment and, depending on the findings replacing the affected part. EASA considers its AD an interim action and states that further AD action may follow.

**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.
Related Service Information Under 1 CFR part 51

The FAA reviewed one document that co-publishes eight Airbus Helicopters Emergency Alert Service Bulletin (EASB) identification numbers: No. 67.00.17 for Model AS365 N, N1, N2, and N3 helicopters and non FAA-type certificated military Model AS365 F, Fs, Fi, K, and K2 helicopters; No. 67.00.10 for non FAA-type certificated military Model AS565 MA, MB, MBe, SA, SB, and UB helicopters; No. 67.11 for non FAA-type certificated military Model SA366 GA helicopters; No. 67A016 for Model EC155 B and B1 helicopters; No. 67.00.77 for Model AS350 B3 helicopters; No. 67A016, 67.00.77, 67.00.48, 67A021 are incorporated by reference in this AD. EASB Nos. 67.00.10, 67.11, and 67.00.33 are not incorporated by reference in this AD.

This service information specifies procedures for inspecting the links between the lower ball end fitting and the M/R actuator rods. This service information also specifies procedures for applying a slippage mark (red mark) and inspecting the slippage mark.

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 30 hours time-in-service (TIS), with any sealing compound on the lower ball end fitting link removed, inspecting each M/R servo actuator
for correct installation by inspecting the link between the lower ball end fitting and the actuator rod for visible threads and play between the actuator rod and the punched lockwasher, inspecting for protrusion of the threaded shouldered bushing from the punched lockwasher, and inspecting the alignment between the punching of the punched lockwasher and the stud of the lower ball end fitting. Depending on the inspection results, this AD requires replacing the M/R servo actuator and reporting the inspection results to Airbus Helicopters if there is any visible thread or play between the actuator rod and the punched lockwasher, protrusion of the threaded shouldered bushing, or misalignment between the punching of the punched lockwasher and the stud of the lower ball end fitting. This AD also requires applying a slippage mark from the actuator rod (excluding the chamfered part of the rod) to the nut, including the punched lockwasher and the lockwasher.

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

The EASA AD is applicable to affected M/R servo actuators that were supplied by Airbus Helicopters before August 12, 2019, whereas this AD applies to affected M/R servo actuators that were manufactured before July 25, 2019 or with an unknown date of manufacture, instead. The EASA AD requires the one-time inspection within 55 flight hours, whereas this AD requires the one-time inspection within 30 hours TIS instead. The EASA AD requires a longer-term inspection of the slippage mark for misalignment for affected M/R servo actuators regardless of when they were originally supplied, whereas this AD does not. The FAA plans to publish a notice of proposed rulemaking to give the public an opportunity to comment on this longer-term requirement.
**Interim Action**

The FAA considers this AD to be an interim action. If final action is later identified, the FAA might consider further rulemaking then.

**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 the 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 1,270 helicopters of U.S. Registry. Labor rates are estimated at $85 per work-hour. Based on these numbers, the FAA estimates that operators may incur the following costs in order to comply with this AD.

Inspecting the M/R servo actuators takes about one work-hour for an estimated cost of $85 per helicopter and $107,950 for the U.S. fleet. Applying a slippage mark takes a minimal amount of time at a nominal cost.

If required, reporting information takes about 1 hour for an estimated cost of $85.

Replacing an M/R actuator takes about 2 work-hours and parts cost up to $53,315 for an estimated cost of up to $53,485 per replacement.

**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 the required corrective action must be completed within 30 hours TIS, a time period of up to one month based on the average flight-hour utilization rate of these helicopters. Therefore, the FAA finds good cause that notice and opportunity for prior public comment are impracticable. In addition, for the reason(s)
stated above, the FAA finds that good cause exists 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.
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):

2020-20-14 Airbus Helicopters: Amendment 39-21270; Docket No. FAA-2020-0856; Product Identifier 2019-SW-071-AD.

(a) Applicability

This AD applies to the following Airbus Helicopters model helicopters, certificated in any category:

(1) Model SA-365N, SA-365N1, AS-365N2, AS 365 N3, EC 155B, and EC155B1 helicopters with a main rotor (M/R) servo actuator part number (P/N) 704A44831074 (manufacturer part number (MP/N) SC8031), P/N 704A44831117 (MP/N SC8031-1), P/N 704A44831144 (MP/N SC8031-2), P/N 704A44831106 (MP/N SC8031A), P/N 704A44831097 (MP/N SC8032), P/N 704A44831118 (MP/N SC8032-1), P/N 704A44831145 (MP/N SC8032-2), P/N 704A44831127 (MP/N SC8033-1), P/N 704A44831146 (MP/N SC8033-2), P/N 704A44831128 (MP/N SC8034-1), P/N...
(2) Model AS350B3, AS355F, AS355F1, AS355F2, AS355N, AS355NP, EC130B4, and EC130T2 helicopters with an M/R servo actuator P/N 704A44831102 (MP/N SC8042) or P/N 704A44831103 (MP/N SC8043) manufactured before July 25, 2019 or with an unknown date of manufacture, installed.

(b) Unsafe Condition

This AD defines the unsafe condition as an uncoupled M/R servo actuator rod. This condition could result in excessive vibrations, increased loads on the flight controls, failure of the M/R servo actuator, 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, with any sealing compound on the lower ball end fitting link removed, determine if each M/R servo actuator is correctly installed by:

   (i) Inspecting the link between the lower ball end fitting (f) and the actuator rod (a) for visible threads and play between the actuator rod (a) and the punched lockwasher (b) as depicted in Figures 1 and 2 of Airbus Helicopters Emergency Alert Service
Bulletin (EASB) Nos. 67.00.17, 67A016, 67.00.77, 67.00.48, or 67A021, each Revision 0 and dated July 25, 2019 (EASB 67.00.17, 67A016, 67.00.77, 67.00.48, or 67A021), as applicable to your helicopter. If there is a visible thread or play, before further flight, replace the M/R servo actuator.

(ii) Inspecting for protrusion of the threaded shouldered bushing (c) from the punched lockwasher (b) as depicted in Figure 3 of EASB 67.00.17, 67A016, 67.00.77, 67.00.48, or 67A021, as applicable to your helicopter. If there is a protrusion, before further flight, replace the M/R servo actuator.

(iii) Inspecting the alignment between the punching of the punched lockwasher (b) and the stud of the lower ball end fitting (f) as depicted in Figure 4 of EASB 67.00.17, 67A016, 67.00.77, 67.00.48, or 67A021, as applicable to your helicopter. If there is misalignment, before further flight, replace the M/R servo actuator.

(2) After accomplishing paragraph (e)(1) of this AD, before further flight, apply a slippage mark from the actuator rod (a) (excluding the chamfered part of the rod) to the nut (e), including the punched lockwasher (b) and the lockwasher (d) as depicted in Figure 5 of EASB 67.00.17, 67A016, 67.00.77, 67.00.48, or 67A021, as applicable to your helicopter.

(3) If any parts were required to be replaced as a result of the inspections required by paragraph (e)(1) of this AD, within 10 days after completing the inspection, report the information in Appendix 1 to this AD by email to support.technical-hydraulics.ah@airbus.com.

(4) For Model SA-365N, SA-365N1, AS-365N2, AS 365 N3, EC 155B, and EC155B1 helicopters, as of the effective date of this AD, do not install an M/R servo
actuator identified in paragraph (a)(1) of this AD on any helicopter, unless the actions
required by paragraphs (e)(1) and (2) of this AD have been accomplished.

(5) For Model AS350B3, AS355F, AS355F1, AS355F2, AS355N, AS355NP,
EC130B4, and EC130T2 helicopters, as of the effective date of this AD, do not install an
M/R servo actuator identified in paragraph (a)(2) of this AD on any helicopter, unless the
actions required by paragraphs (e)(1) and (2) of this AD have been accomplished.

(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, Rotorcraft Standards Branch, FAA, may approve AMOCs for
this AD. Send your proposal to: Matthew L. Thompson, Aerospace Engineer, DSCO
Branch, Compliance & Airworthiness Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5251; 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) Airbus Helicopters EASB Nos. 67.00.10, 67.11, and 67.00.33, each Revision 0 and dated July 25, 2019, which are not incorporated by reference, contain additional information about the subject of this AD. 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. 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. 2019-0184, dated July 29, 2019. You may view the EASA AD

(i) **Subject**

Joint Aircraft Service Component (JASC) Code: 6730, Rotorcraft Servo 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.

(i) Airbus Helicopters Emergency Alert Service Bulletin (EASB) No. 67.00.17, Revision 0, dated July 25, 2019.

(ii) Airbus Helicopters EASB No. 67A016, Revision 0, dated July 25, 2019.

(iii) Airbus Helicopters EASB No. 67.00.77, Revision 0, dated July 25, 2019.

(iv) Airbus Helicopters EASB No. 67.00.48, Revision 0, dated July 25, 2019.

(v) Airbus Helicopters EASB No. 67A021, Revision 0, dated July 25, 2019.

Note 1 to paragraph (j)(2): Airbus Helicopters EASB Nos. 67.00.17, 67A016, 67.00.77, 67.00.48, and 67A021, each Revision 0 and dated July 25, 2019 are co-published as one document along with Airbus Helicopters EASB Nos. 67.00.10, 67.11, and 67.00.33, each Revision 0 and dated July 25, 2019, which are not incorporated by reference in this AD.

(3) 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.

(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.
Appendix 1 to AD 2020-20-14

Report the following information by email to support.technical-hydraulics.ah@airbus.com.
(Airbus Helicopters Emergency Alert Service Bulletin Nos. 67.00.17, 67A016, 67.00.77, 67.00.48, and 67A021, each Revision 0 and dated July 25, 2019.)

(1) Date of Inspection:

(2) Helicopter Model and Serial Number:

(3) Total hours time-in-service (TIS) on the aircraft:

(4) Date of manufacture of the main rotor (M/R) servo actuator:

(5) Total hours TIS on M/R servo actuator:

(6) Total hours TIS since last service of the M/R servo actuator and description of service:

(7) Describe in detail any information and findings and, if possible, provide photos.

Issued on September 24, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2020-22259 Filed: 10/7/2020 8:45 am; Publication Date: 10/8/2020]