DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0308; Project Identifier MCAI-2020-00594-R; Amendment 39-21619; AD 2021-13-14]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH (AHD) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Airbus Helicopters Deutschland GmbH (AHD) Model BO-105A, BO-105C, BO-105S, and BO-105LS A-3 helicopters. This AD was prompted by an uncommanded activation of the hoist cable cutter function on an MBB-BK117 C-1 helicopter, which prompted a design review of the BO105 hoist control grip with coiled cable. This AD requires inspections of the hoist control grip with coiled cable and deactivation of the hoist cutter function, as specified in a European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, which is incorporated by reference. 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 a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
**ADDRESSES:** For material incorporated by reference (IBR) in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this material on the EASA website at https://ad.easa.europa.eu. You may view this material 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 in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0308.

**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-2021-0308; 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:** Blaine Williams, Aerospace Engineer, Cabin Safety & Environmental Systems Section, Los Angeles ACO Branch, Compliance & Airworthiness Division, 3960 Paramount Blvd., Lakewood, CA 90712; telephone (562) 627-5371; email blaine.williams@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Background**

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2015-0017, dated February 4, 2015 (EASA AD 2015-0017), to correct an unsafe condition for certain Airbus Helicopters Deutschland GmbH Model BO105 A, BO105 C, BO105 D, BO105 S, and BO105 LS A-3 helicopters.
The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Model BO-105A, BO-105C, BO-105S, and BO-105LS A-3 helicopters. The NPRM published in the Federal Register on April 19, 2021 (86 FR 20341). The NPRM was prompted by an uncommanded activation of the hoist cable cutter function on an MBB-BK117 C-1 helicopter which prompted a design review of the BO105 hoist control grip with coiled cable. The NPRM proposed to require accomplishing the actions specified in EASA AD 2015-0017, described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this proposed AD and except as discussed under “Differences Between this AD and the EASA AD.”

The FAA is issuing this AD to prevent uncommanded cutting of the hoist cable and subsequent injury to persons being lifted by the hoist and injury to persons on the ground. See the EASA AD for additional background information.

Discussion of Final Airworthiness Directive

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 in the NPRM.

Related Service Information Under 1 CFR Part 51

For Model BO105 C, BO105 D, BO105 S, and BO105 LS A-3 helicopters, EASA AD 2015-0017 specifies to perform an initial and recurring inspections of the hoist control grip with coiled cable of the hoist and depending on the results, replacing the hoist control grip with coiled cable with a serviceable part. EASA AD 2015-0017 also
specifies to replace any hoist control grip with coiled cable that has exceeded 10 years since first installation or since last overhaul and to deactivate the cable cutter function in accordance with referenced service information.

EASA AD 2015-0017 also specifies to not operate the hoist on any of the Model BO105 A, BO105 D, variant BO105 D, and BO105 DS helicopters. For Model BO105 helicopters, except for BO105 D, variant BO105 D, and BO105 DS helicopters, EASA specifies to amend the helicopter flight manual (FM) to incorporate the temporary revision as specified in Table 1 of the EASA AD.

This material 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 EASA AD**

Where EASA AD 2015-0017 refers to its effective date, this AD requires using the effective date of the FAA AD. Where EASA AD 2015-0017 specifies this unsafe condition for Airbus Helicopters Deutschland GmbH Model BO105 A, BO105 C, BO105 D, BO105 S, and BO105 LS A-3 helicopters, this AD does not include Model BO-105 D helicopters, because this model is not FAA type-certificated. Where EASA AD 2015-0017 specifies replacing an affected part, this AD requires removing the part from service. Where the service information referenced in the EASA AD refers to calendar time for certain actions, this AD uses hours time-in-service instead. The EASA AD allows a tolerance to certain compliance times, whereas this AD does not. The EASA AD requires using service information to accomplish the preflight checks of the control grip with coil cable, whereas this AD requires visually checking the condition of the control grip and coiled cable for mechanical damage including deformed or damaged switches, damaged housing, abrasion, cracks, and cuts instead. The owner/operator (pilot) may perform the required visual checks but must enter compliance with the applicable
paragraph of this AD in the helicopter maintenance records in accordance with 14 CFR 43.9(a)(1) through (4) and 91.417(a)(2)(v). A pilot may perform these checks because they only involve visually checking affected control grips with coiled cable. This action can be performed equally well by a pilot or a mechanic. This check is an exception to the FAA's standard maintenance regulations.

**Interim Action**

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

**Costs of Compliance**

The FAA estimates that this AD affects 20 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 hoist control grip with coiled cable takes up to one quarter work-hour for an estimated cost of $21 per helicopter and $420 for the U.S. fleet, per inspection cycle. Replacing the hoist control grip takes about 1 work-hour and parts cost $1,956 for an estimated cost of $2,041 per helicopter. Replacing the coiled cable takes about 2 work-hours and parts cost $1,858 for an estimated cost of $2,028 per helicopter. Deactivation of the cable cutter function takes about 1 work hour and parts cost about $26 for an estimated cost $111 per hoist control grip.

**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.

**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:
(a) Effective Date

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

(b) Affected ADs

None.

(c) Applicability


(d) Subject


(e) Reason

This AD was prompted by uncommanded activation of the hoist cable cutter function on an MBB-BK117 C-1 helicopter which prompted a design review of the BO105 hoist control grip with coiled cable. The FAA is issuing this AD to prevent uncommanded cutting of the hoist cable and subsequent injury to persons being lifted by the hoist and injury to persons on the ground.

(f) Compliance

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

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2015-0017.
(h) Exceptions to EASA AD 2015-0017

(1) Where EASA AD 2015-0017 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where Note 1 of EASA AD 2015-0017 specifies a non-cumulative compliance time tolerance of 10% for certain required compliance times, this AD does not allow this tolerance.

(3) Where paragraph (1) of EASA AD 2015-0017 specifies a compliance time of “not to exceed 30 days”, this AD requires a compliance time of within 13 hours time-in-service.

(4) Where paragraph (4) of EASA AD 2015-0017 specifies a compliance time of “within 9 months”, this AD requires a compliance time of within 108 hours time-in-service.

(5) Where paragraph (5) of EASA AD 2015-0017 specifies a compliance time of “within 3 months”, this AD requires a compliance time of within 36 hours time-in-service.

(6) Where paragraph (3) of EASA AD 2015-0017 specifies replacing a part with a serviceable part, this AD requires removing the part from service.

(7) Where the service information referenced in EASA AD 2015-0017 specifies to use tooling, equivalent tooling may be used.

(8) Where the service information referenced in paragraph (2) of EASA AD 2015-0017 specifies a visual check of the control grip coiled cable, this AD requires, before next flight after the effective date of this AD involving a hoist operation, visually checking the control grip with coiled cable for mechanical damage including deformed or damaged switches, damaged housing, abrasion, cracks, and cuts. These visual checks may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in
accordance with 14 CFR 43.9(a)(1) through (4) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(9) Where EASA AD 2015-0017 refers to November 10, 2014, the effective date of EASA AD 2014-0235, this AD requires using the effective date of this AD.

(10) The “Remarks” section of EASA AD 2015-0017 does not apply to this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

For more information about this AD, contact Blaine Williams, Aerospace Engineer, Cabin Safety & Environmental Systems Section, Los Angeles ACO Branch, Compliance & Airworthiness Division, 3960 Paramount Blvd., Lakewood, CA 90712; telephone (562) 627-5371; email blaine.williams@faa.gov.

(k) 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.


(ii) [Reserved]

(3) For EASA AD 2015-0017, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the EASA website at https://ad.easa.europa.eu.

(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. This material may be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0308.

(5) You may view this material 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 June 16, 2021.

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

[FR Doc. 2021-14778 Filed: 7/12/2021 8:45 am; Publication Date: 7/13/2021]