

Airbus Helicopers, Inc. Technical Support 2701 Forum Drive Grand Prairie, TX 75052 November 21, 2019

Subject: GLOBAL AMOC for AD 2000-17-08

Attachments: AD 2000-17-08 Issue Date August 21, 2000 GLOBAL AMOC Dated November 21, 2019

To all BO105 Operators,

On October 2nd 2000, AD 2000-17-08 became effective for the Airbus Helicopter models BO105A, BO105C, BO105C2, BO105CB2, BO105CB4, BO105S, BO105CS-2, BO105CBS2, BO105CBS4 and BO105LS-A1. The Maintenance Manuals for the above models has increased the Life Limit of the Tension Torsion Straps identified as 117-14111 from 10 years or 40,000 flights to 12 years or 40,000 flights.

This letter is to bring to our customers attention that the attached AMOC letter is to allow the current Maintenance Manual service life limits listed in Chapter 101 Rev 27 to be used for Tension Torsion Straps with PN 117-14111.

Best Regards,

Larry Huntley

Director, Technical Support Airbus Helicopters, Inc. PH 972-641-5204

Fax 972-641-3710

Email: larry.huntley@airbus.com



Southwest Region Arkansas, Louisiana, New Mexico, Oklahoma, Texas Fort Worth, Texas 76177

November 14, 2019

Mr. Dave Vogel Senior Technical Representative Airbus Helicopter Inc. 2701 N. Forum Dr. Grand Prairie, TX 75052-7099

Dear Mr. Vogel

We received your proposal for a Global Alternate Method of Compliance (AMOC) dated 28 October 2019 to paragraph (c) of Airworthiness Directive (AD) 2000-17-08 (directorate identifier 99-SW-66-AD). The AD applies to Airbus Helicopters Deutschland GmbH (Airbus) Models BO-105A, BO-105C, BO-105 C-2, BO-105 CB-2, BO-105 CB-4, BO-105S, BO-105 CS-2, BO-105 CBS-2, BO-105 CBS-4, and BO-105LS A-1 helicopters.

Airbus Helicopters increased the life limit of the tension torsion strap part number (P/N) 117-14111 from 10 years or 40,000 flights to 12 years or 40,000 flights, whichever occurs first, through the use of historical service life of the part and by analysis. The new life limits are listed in the current version (revision 27) of the helicopter Maintenance Service Manual (MSM).

You requested that the life limits mandated AD 2000-17-08 paragraph (c) not apply to tension torsion strap part number (P/N) 117-14111, and that the new life limit for the tension strap P/N 117-14111 be set to 12 years or 40,000 flights, whichever occurs first, in accordance with revision 27 of the MSM.

Your AMOC is FAA approved for paragraph (c).

This FAA AMOC is transferable with the aircraft to an operator who operates the aircraft under the U.S. registry.

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

All provisions of AD 2000-17-08 that are not specifically referenced above remain fully applicable and must be complied with accordingly.

This AMOC only applies to the FAA AD listed above. The FAA does not have the authority to approve this as an AMOC to any AD issued by another civil aviation authority (CAA).

Approval of an AMOC to another CAA's AD must come from that CAA. A copy of this response will be forwarded to the CAA where these aircraft are registered for their consideration. If there are any questions regarding this approval, please contact Mr. Matthew Fuller by telephone (817) 222-5161, or e-mail matthew.fuller@faa.gov.

Thank you,

Stephen Barbini

- Styl- Bak

Manager, Safety Management Section, AIR-682, Policy & Innovation Division Aircraft Certification Service

Cc: Fort Worth FSDO, Fort Worth AEG

*Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 52010 8/28/2000]

Docket No. 99-SW-66-AD; Amendment 39-11882; AD 2000-17-08

RIN 2120-AA64

Airworthiness Directives; Eurocopter Deutschland GMBH Model BO-105A, BO-105C, BO-105 C-2, BO-105 CB-2, BO-105 CB-4, BO-105S, BO-105 CS-2, BO-105 CBS-2, BO-105 CBS-4, and BO-105LS A-1 Helicopters PDF Copy (If Available):

▼Preamble Information

AGENCY: Federal Aviation Administration, DOT

ACTION: Final rule

SUMMARY: This amendment supersedes an existing airworthiness directive (AD) that applies to Eurocopter Deutschland GMBH (ECD) Model BO-105A, BO-105C, BO-105 C-2, BO-105 CB-2, BO-105 CB-4, BO-105S, BO-105 CS-2, BO-105 CBS-2, BO-105 CBS-4, and BO-105LS A-1 helicopters. That AD requires creating a component log card or equivalent record and determining the calendar age and number of flights on each tension-torsion (TT) strap. That AD also requires inspecting and removing, as necessary, certain unairworthy TT straps. This amendment establishes a life limit for certain main rotor TT straps. This amendment is prompted by a need to establish a life limit for certain TT straps because of an accident in which a main rotor blade (blade) separated from an ECD Model MBB-BK 117 helicopter due to fatigue failure of a TT strap. The same part-numbered TT strap is used on the ECD Model BO-105 helicopters. The actions specified by this AD are intended to prevent fatigue failure of the TT strap, loss of a blade, and subsequent loss of control of the helicopter.

DATES: Effective October 2, 2000

FOR FURTHER INFORMATION CONTACT: Charles Harrison, Aviation Safety Engineer, FAA,

Rotorcraft Directorate, Rotorcraft Standards Staff, Fort Worth, Texas 76193-0110, telephone (817) 222-5128,

fax (817) 222-5961.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation

Regulations (14 CFR part 39) by superseding AD 99-19-22, which applies to ECD Model BO-105A, BO-105C, BO-105 C-2, BO-105 CB-2, BO-105 CB-4, BO-105S, BO-105 CS-2, BO-105 CBS-2, BO-105 CBS-4, and BO-105LS A-1 helicopters, was published in the **Federal Register** on April 24, 2000 (65 FR 21673). That action proposed to require establishing a life limit for the TT straps of 120 months or 40,000 flights, whichever occurs first.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposal or the FAA's determination of the cost to the public. The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

The FAA estimates that 200 helicopters of U.S. registry will be affected by this AD, that it will take approximately 16 work hours per helicopter to accomplish the required actions, and that the average labor rate is \$60 per work hour. Required parts will cost approximately \$10,400 per helicopter. Based on these figures, the total cost impact of this AD on U.S. operators is estimated to be \$2,272,200.

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by removing Amendment 39-11357 (64 FR 54770, October 8,

1999), and by adding a new airworthiness directive (AD), Amendment 39-11882, to read as follows:

▼Regulatory Information

2000-17-08 EUROCOPTER DEUTSCHLAND GMBH: Amendment 39-11882. Docket No. 99-SW-66- AD. Supersedes AD 99-19-22, Amendment 39-11357, Docket No. 99-SW-52-AD. Applicability: Model BO-105A, BO-105C, BO-105 C-2, BO-105 CB-2, BO-105 CB-4, BO-105S, BO-105 CS-2, BO-105 CBS-2, BO-105 CBS-4, and BO-105LS A-1 helicopters, with part number (P/N) 2604067 (Bendix) or J17322-1 (Lord) rotor tension-torsion (TT) strap, installed, certificated in any category.

NOTE 1: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue failure of a TT strap, loss of a main rotor blade (blade), and subsequent loss of control of the helicopter, accomplish the following:

- (a) Before further flight,
- (1) Create a component log card or equivalent record for each TT strap.
- (2) Review the history of the helicopter and each TT strap. Determine the age since initial installation on any helicopter (age) and the number of flights on each TT strap. Enter both the age and the number of flights for each TT strap on the component log card or equivalent record. When the number of flights is unknown, multiply the number of hours time-in-service (TIS) by 5 to determine the number of flights. If a TT strap has been previously used at any time on Model BO-105LS A-3 "SUPER LIFTER", BO-105 CB-5, BO-105 CBS-5, BO-105 DBS-5, or any MBB-BK 117 series helicopter, multiply the number of flights accumulated on those other models by a factor of 1.6 and then add that result to the number of flights accumulated on the helicopters affected by this AD.
- (3) Remove any TT strap from service if the total hours TIS or number of flights and age cannot be determined.
- (b) On or before January 1, 2001, remove any TT strap that has been in service 120 months since initial installation on any helicopter or accumulated 40,000 flights (a flight is a takeoff and a landing), on any helicopter. Replace the TT strap with an airworthy TT strap.

- (c) This AD revises the Airworthiness Limitations Section of the maintenance manual by establishing a life limit for the TT strap, P/N 2604067 and J17322-1, of 120 months or 40,000 flights, whichever occurs first.
- (d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Regulations Group, Rotorcraft Directorate, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Regulations Group.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Regulations Group.

- (e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the helicopter to a location where the requirements of this AD can be accomplished.
- (f) This amendment becomes effective on October 2, 2000.

NOTE 3: The subject of this AD is addressed in the Luftfahrt Bundesamt (Federal Republic of Germany) AD 1999-300/3, dated August 31, 1999.

▼Footer Information

Issued in Fort Worth, Texas, on August 21, 2000. Eric Bries, Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.