

Emergency Airworthiness DirectiveAD No.:2022-0130-EIssued:30 June 2022

Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I Part M.A.301, or Annex Vb Part ML.A.301, as applicable, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I Part M.A.303, or Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name: AIRBUS HELICOPTERS

Type/Model designation(s): EC 225 LP helicopters

Effective Date: 01 July 2022

TCDS Number(s): EASA.R.002

Foreign AD: Not applicable

Supersedure: None

ATA 62 – Main Rotor – Hub Sleeves – Inspection

Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter

Applicability:

EC 225 LP helicopters, all manufacturer serial numbers

Definitions:

For the purpose of this AD, the following definitions apply:

The ASB: AH Emergency Alert Service Bulletin (ASB) EC225-62A017.

Affected part: Main Rotor Hub (MRH) sleeves, having Part Number 332A31-3071-00.

Serviceable part: Any MRH sleeve, eligible for installation, which is not an affected part; or an affected part that is new, or has passed an inspection (no defect found or defect corrected) in accordance with the instructions of the ASB.



BFF: Pre-flight check before the first flight (BFF) of the day, as defined in EC 225 LP Master Servicing Manual.

Groups: Group 1 helicopters are those that have an affected part installed. Group 2 helicopters are those that do not have an affected part installed.

Reason:

An occurrence was reported of finding a cracked affected part. The investigation determined that this was a fatigue crack which had initiated from a significant corrosion pit, located in an area of the MRH sleeve with chipped paint. The surface protection had not been touched up.

This condition, if not detected and corrected, could lead to structural failure of the affected part, possibly resulting in loss of a helicopter.

To address this potential unsafe condition, AH issued the ASB to provide inspection instructions.

For the reasons described above, this AD requires a one-time detailed visual inspection (DVI) of each affected part and, depending on findings, accomplishment of applicable follow-on repetitive inspections and corrective actions.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

Inspection:

- (1) For Group 1 helicopters: During the next BFF after the effective date of this AD, accomplish a DVI of each affected part in accordance with the instructions of the ASB.
- (2) If, during the inspection as required by paragraph (1) of this AD, paint flaking and/or paint touch up is identified on any affected part, before next flight, accomplish another DVI on that affected part in accordance with the instructions of the ASB.

Corrective Action(s):

- (3) If, during the inspection as required by paragraph (2) of this AD, no visible crack is identified, within 15 flight hours (FH) or 3 months, whichever occurs first after the inspection as required by paragraph (1) of this AD, accomplish a high-frequency eddy-current (HFEC) inspection in accordance with the instructions of the ASB.
- (4) If, during the inspection as required by paragraph (3) of this AD, no crack is detected, before next flight, accomplish chemical stripping and a fluorescent penetrant inspection of the affected part in accordance with the instructions of the ASB.
- (5) If, during the inspection as required by paragraph (4) of this AD, any corrosion is detected, before next flight, remove the corrosion with abrasive cloth in accordance with the instructions of the ASB.



- (6) If, during the inspection as required by paragraph (4) of this AD, no corrosion is detected, before next flight, install protection on the affected part in accordance with the instructions of the ASB.
- (7) If, during the corrosion removal as required by paragraph (5) of this AD, the corrosion was successfully removed, accomplish the actions as required by paragraph (7.1) and (7.2) of this AD in accordance with the instructions of the ASB.
 - (7.1) Before next flight, install protection on the affected part.
 - (7.2) Within 15 FH after protecting the affected part as required by paragraph (7.1) of this AD, and, thereafter, at intervals not to exceed 15 FH, accomplish an HFEC inspection of the affected part.
- (8) If, during the corrosion removal as required by paragraph (5) of this AD, the corrosion removal was not successful, before next flight, contact AH for approved repair instructions and accomplish those instructions accordingly.

Alternative Method:

- (9) As an alternative to paragraphs (4) to (8) of this AD, provided no crack is detected during the inspection as required by paragraph (3) of this AD, accomplish the actions as specified in paragraph (9.1) and (9.2) of this AD in accordance with the instructions of the ASB.
 - (9.1) Before next flight, install protection on the affected part.
 - (9.2) Within 15 FH after protecting the affected part as specified in paragraph (9.1) of this AD and, thereafter, at intervals not to exceed 15 FH, accomplish an HFEC inspection of the affected part.

Replacement:

(10) If, during any inspection as specified in paragraph (2), (3), (7.2) or (9.2) of this AD, any crack is detected, before next flight, replace the affected part with a serviceable part in accordance with the instructions of the ASB.

Terminating Action:

- (11) Accomplishment of HFEC inspections of an affected part, as required by paragraph (7.2) of this AD, with no crack detected after 75 FH of operation, constitutes terminating action for the repetitive inspections as required by paragraph (7.2) of this AD for that affected part.
- (12) Replacement of each affected part on a helicopter constitutes terminating action for repetitive inspections as required by paragraph (7.2), or as specified in paragraph (9.2) of this AD, as applicable, for that helicopter.

Part Installation:

(13) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install on a helicopter an MRH sleeve, provided it is a serviceable part, as defined in this AD.



Ref. Publications:

AH EASB EC225-62A017 original issue dated 30 June 2022.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

Remarks:

- 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
- 2. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
- 3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the <u>EU aviation safety</u> reporting system. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
- For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters (Technical Support), Aéroport de Marseille Provence, 13725 Marignane Cedex, France, Telephone +33 (0)4 42 85 97 97, Fax +33 (0)4 42 85 99 66, Airbus World: Technical Request Management: <u>https://airbusworld.helicopters.airbus.com</u>, E-mail: <u>TechnicalSupport.Helicopters@airbus.com</u>.

