



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 19-032

Issued: 27 February 2019

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

AIRBUS HELICOPTERS

Type/Model designation(s):

EC 225 LP helicopters

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.R.002

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2017-0191R2 dated 15 December 2017.

ATA 62 – Main Rotor – Rotating Swashplate Yokes – Inspection / Rework / Service Life Limit

Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France

Applicability:

EC 225 LP helicopters, all manufacturer serial numbers (s/n).

Definitions:

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

The ASB: EC225 Emergency Alert Service Bulletin (ASB) 05A051 Revision 2.

Affected part: Main Rotor (M/R) rotating swashplate Part Number (P/N) 332A31-3074-00 or P/N 332A31-3074-01, all s/n.

Serviceable part: An M/R rotating swashplate, which is an affected part that has accumulated less than 7 years since new (date of manufacture); or an M/R rotating swashplate that has accumulated 7 years or more, but less than 12 years since new (date of manufacture), and that, before



installation, has passed an inspection (no defects found), or has been reworked in each yoke area, in accordance with the instructions of Section 3.B of the ASB.

Reason:

It was identified that the control rod attachment yokes of the M/R rotating swashplate are susceptible to crack development, due to ageing phenomenon.

This condition, if not detected and corrected, could lead to structural failure of a control rod attachment yoke of the M/R rotating swashplate, possibly resulting in loss of control of the helicopter.

To address this potentially unsafe condition, AH issued EC225 Emergency ASB 05A051 to provide inspection instructions and EASA issued Emergency AD 2017-0191-E (later revised) to require repetitive inspections of the M/R rotating swashplate yokes and, depending on findings, accomplishment of applicable corrective action(s).

After EASA AD 2017-0191R2 was issued, additional analysis determined that it is necessary to introduce a Service Life Limit (SLL) for affected parts to ensure their serviceability. Consequently, AH issued the ASB to introduce an SLL applicable to the affected parts and provide reporting instructions.

For the reasons described above, this AD retains the requirements of EASA AD 2017-0191R2, which is superseded, requires implementation of the applicable SLL, after which the affected part has to be removed from service, and requests reporting.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within the compliance time defined in Table 1 of this AD, and, thereafter, at intervals not to exceed 15 flight hours (FH) or 7 days, whichever occurs first, inspect each yoke of the affected part in accordance with the instructions of Section 3.B of the ASB.

Table 1 – M/R Swashplate Yoke Inspection (see Note 1 of this AD)

Time Accumulated	Compliance Time
Less than 7 years	Within 15 FH or 7 days after accumulating 7 years
7 years or more	Within 15 FH or 7 days after 27 September 2017 [the effective date of EASA AD 2017-0191 at original issue]

- (2) Within the compliance time defined in Table 2 of this AD, strip and inspect each yoke area of the affected part as defined in, and in accordance with, the instructions of Section 3.B of the ASB.



Table 2 – M/R Swashplate Yoke Strip Inspection (see Note 1 of this AD)

Time Accumulated	Compliance Time
Less than 7 years	Before exceeding 100 FH after accumulating 7 years
7 years or more	Before exceeding 100 FH after 27 September 2017 [the effective date of EASA AD 2017-0191 at original issue]

Note 1: The time specified in Table 1 or Table 2 of this AD is the time accumulated on 27 September 2017 [the effective date of EASA AD 2017-0191 at original issue] by the affected part since new.

Corrective Action(s):

- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, any corrosion is detected, before next flight, rework the affected yoke area(s) of the affected part in accordance with the instructions of Section 3.B of the ASB.
- (4) If, during any inspection as required by paragraph (1) or (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.

Credit:

- (5) Inspection(s) and corrective action(s) accomplished on a helicopter, before the effective date of this AD, in accordance with the instructions of EC225 Emergency ASB 05A051 original issue or Revision 1 is acceptable to comply with the initial requirements of paragraphs (1), (2), (3) and (4) of this AD for that helicopter.

Part Replacements / SLL Implementation:

- (6) Within the compliance time defined in Table 3 of this AD and, thereafter, before an affected part exceeds 12 years since new (date of manufacture), replace that affected part with a serviceable part in accordance with the instructions of Section 3.B of the ASB.

Table 3 – M/R Swashplate replacement (see Note 2 of this AD)

Time Accumulated	Compliance Time
Less than 11 years and 9 months	Before exceeding 12 years
11 years and 9 months or more	Within 3 months after the effective date of this AD

Note 2: The time specified in Table 3 of this AD is the time accumulated on the effective date of this AD by the affected part since new (since the date of manufacture).

Reporting:

- (7) If during the initial inspection, as required by paragraphs (1) and (2) of this AD, no damage is detected, or during any inspection, as required by paragraphs (1) and (2) of this AD, any damage is detected, within 30 days after that inspection or 30 days after the effective date of this AD, whichever occurs later, report the inspection results to AH in accordance with the instructions of Appendix 4.B of the ASB.



Terminating Action:

(8) None.

Parts Installation:

(9) From the effective date of this AD, installation of an affected part on a helicopter is allowed, provided that the part is a serviceable part, as defined in this AD, and that, following installation of an affected part, the swashplate yokes are inspected and/or replaced as required by this AD.

Ref. Publications:

AH EC225 Emergency ASB 05A051 original issue dated 22 September 2017, and Revision 1 dated 16 November 2017, and Revision 2 dated 26 February 2019.

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

Remarks:

1. This Proposed AD will be closed for consultation on 27 March 2019.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#).
4. For any question concerning the technical content of the requirements in this PAD, 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, Web portal: <https://keycopter.airbushelicopters.com> > Technical Requests Management, E-mail: support.technical-dyncomp.ah@airbus.com, and TechnicalSupport.Helicopters@airbus.com.

