



Airworthiness Directive

AD No.: 2018-0286

Issued: 20 December 2018

Note: This 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, 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 agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

ENSTROM HELICOPTER CORPORATION

Type/Model designation(s):

F-28, 280 and 480 helicopters

Effective Date: 03 January 2019

TCDS Number(s): EASA.IM.R.122

Foreign AD: Federal Aviation Administration (FAA) [AD 2017-26-03](#) dated 20 December 2017.

Supersedure: This AD supersedes EASA AD 2018-0067 dated 23 March 2018.

ATA 62 – Main Rotor – Hydraulic Damper / Belt Tension Shaft Rod End Assembly – Inspection

Manufacturer(s):

Enstrom Helicopter Corporation (EHC)

Applicability:

F-28A, F-28C, F-28C-2, F-28F, F-28F-R, 280, 280C, 280F, 280FX, 480 and 480B helicopters, all serial numbers (s/n).

Note 1: FAA AD 2017-26-03 applies to three additional helicopter models but, at this time, these are not validated in Europe.

Definitions:

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

Affected part: Main rotor hydraulic damper and belt tension shaft rod end bearing assemblies, Part Number (P/N) 01-824-08E-011, P/N 09455-01-824-08E-011, P/N ECD091-1, P/N ASMK8T, P/N M81935/1-08K, P/N MS21242S8K and P/N MTK8.

The applicable SDB: EHC Service Directive Bulletin (SDB) 0127 Revision 1, or Revision 2, and SDB T-058 original issue, or Revision 1, as applicable.



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 a failed rod end bearing assembly of one of the hydraulic damper assemblies of the main rotor system. Analysis of the rod end revealed corrosion in the root of the threads.

This condition, if not detected and corrected, could lead to cracks in a bearing assembly, possibly resulting in failure of the rod end, loss of a main rotor blade and consequent loss of control of the helicopter.

Prompted by these findings, EHC issued the applicable SDB. Multiple supplier P/N rod end bearing assemblies are eligible for installation. Consequently, the FAA, the State of Design authority for the affected helicopter type, issued AD 2017-26-03, which was adopted by EASA, applicable to helicopters that have an affected part installed. That AD requires a one-time inspection of the affected part(s), and, if corrosion is found, replacement of the affected part.

The FAA AD does not require repetitive inspections, whereas the applicable SDB specifies to repeat the inspection every 100 flight hours (FH) or during an annual inspection. EASA has determined that these inspections are necessary to ensure the continued airworthiness of the affected helicopters. It is expected that the FAA will take further AD action to require these repetitive inspections, but EASA has no information on when that AD will be issued.

Consequently, EASA issued AD 2018-0067 to require repetitive inspections of the affected parts to detect corrosion and, depending on findings, replacement.

Since that AD was issued, it was determined that, inadvertently, Model 280C helicopters were not included in the Applicability.

For the reasons described above, this AD retains the requirements of EASA AD 2018-0067, which is superseded, and expands the Applicability to include Model 280C helicopters.

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

Required as indicated, unless accomplished previously:

Repetitive Inspection(s):

- (1) For Group 1 helicopters: Within 100 FH or during the next scheduled annual inspection, whichever occurs first after the inspection as required by FAA AD 2017-26-03 (as adopted by EASA), and, thereafter, at intervals not to exceed 100 FH, or during each scheduled annual inspection, whichever occurs first, inspect each affected part in accordance with the instructions of the applicable SDB.
- (2) For 280C helicopters that have accumulated or exceeded 80 FH or 10 months, whichever occurred first since the inspection as required by FAA AD 2017-26-03, the first inspection as required by paragraph (1) of this AD must be accomplished within 20 FH or 2 months, whichever occurs first after the effective date of this AD.



Corrective Action(s):

- (3) If, during any inspection as required by paragraph (1) of this AD, corrosion is detected, before next flight, replace the affected part with a serviceable part in accordance with the instructions of the applicable SDB.

Reporting:

- (4) Within 30 days after each inspection, as required by paragraph (1) of this AD, report the inspection results (including no findings) to Enstrom Product Support in accordance with the instructions of the applicable SDB.

Parts Installation:

- (5) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install an affected part on any helicopter, provided the part is new, or has passed an inspection (no corrosion detected) in accordance with the instructions of the applicable SDB, and that, following installation, the part is inspected as required by paragraph (1) of this AD.

Terminating Action(s):

- (6) Applying corrosion inhibitor on an affected part installed on a helicopter, in accordance with the instructions of EHC SDB 0127 Revision 2 or EHC SDB T-058 Revision 1, as applicable, does not constitute terminating action for the repetitive inspections as required by this AD for that helicopter.

Ref. Publications:

Enstrom Helicopter Corporation SDB 0127 Revision 1 dated 06 October 2017, or Revision 2 dated 20 June 2018.

Enstrom Helicopter Corporation SDB T-058 dated 02 August 2017, or Revision 1 dated 20 June 2018.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was posted on 08 November 2018 as PAD 18-150 for consultation until 06 December 2018. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
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 [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Enstrom Helicopter Corporation, 2209 22nd Street, Menominee, Michigan 49858, United States of America, Telephone: +1 906-863-1200, Fax: +1 906-863-6621, E-mail: engineering@enstromhelicopter.com.

