

Airworthiness DirectiveAD No.:2019-0117Issued:29 May 2019

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:

MECAER AVIATION GROUP S.P.A.

Type/Model designation(s): NH-500D and AMD500N helicopters

Effective Date: 12 June 2019 TCDS Number(s): EASA.R.144

Foreign AD: Not applicable

Supersedure: None

ATA 62 – Main Rotor – Blades – Inspection / Replacement

Manufacturer(s):

Breda-Nardi S.p.A.

Applicability:

NH-500D helicopters, all serial numbers (s/n); and AMD500N helicopter s/n 301.

Definitions:

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

The applicable SB: Mecaer Aviation Group S.p.A. (MAG) Mandatory Service Bulletin (SB) BN-500-133 and BN-500N-028, as applicable (published as a single document), and Helicopter Technology Company, LLC (HTC) Mandatory SB Notice No. 2100-9.

Affected part: Main rotor (MR) blades, having Part Number (P/N) 369D21100-(), P/N 369D21120-(), or P/N 369D21102-(), all dash numbers, all s/n.

Serviceable part: An affected part that is new (not previously installed), or that has passed an inspection (no cracks found) in accordance with the instructions of the applicable SB; or an MR blade that is not an affected part.



Reason:

Occurrences have been reported of finding cracks in the skin next to the trim tab of certain MR blades, manufactured by HTC.

This condition, if not detected and corrected, could lead to in-flight failure of an MR blade, possibly resulting in loss of control of the helicopter.

Prompted by these events, the Federal Aviation Administration (FAA) issued AD 2019-05-04, applicable to MD Helicopters, Inc. (formerly McDonnell Douglas Helicopter Systems, Hughes Helicopters, Inc.) 369 series, 500N and 600N helicopters, to require repetitive inspections of certain MR blades.

As some of these MR blades are common to MAG (formerly Servizi Elicotteristici Italiani S.p.A. (S.E.I.), Breda-Nardi) NH-500D and AMD500N helicopters, MAG issued the SB to provide instructions to inspect the MR blade trim tab end at the trailing edge corner where the trim tab and the MR blade meet, as well as the top and bottom surface of each MR blade adjacent to the inboard trim tab corner, from the trailing edge towards the leading edge.

For the reason described above, this AD requires repetitive inspections of the affected parts and, depending on findings, replacement.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) Within 25 flight hours (FH) after the effective date of this AD, and, thereafter, during each scheduled 100 FH inspection, or at intervals not exceeding 12 months, whichever occurs first, inspect each affected part in accordance with the instructions of the applicable SB.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, any crack is detected, before next flight, replace the cracked MR blade with a serviceable part, as defined in this AD, in accordance with the instructions of the applicable SB.

Terminating Action:

(3) None.

Parts Installation:

(4) From the effective date of this AD, it is allowed to install on any helicopter an affected part, provided that it is a serviceable part, as defined in this AD, and that, following installation, the affected part is inspected as required by this AD.

Ref. Publications:

MAG Mandatory SB BN-500-133 and BN-500N-028 (published as a single document) original issue dated 17 April 2019.



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

HTC Mandatory SB Notice No. 2100-9 original issue dated 25 May 2017.

Remarks:

- 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
- 2. This AD was posted on 24 April 2019 as PAD 19-071 for consultation until 22 May 2019. No comments were received during the consultation period.
- 3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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.
- For any question concerning the technical content of the requirements in this AD, please contact: Mecaer Aviation Group S.p.A., Via dell'Artigianato V Traversa 1, 63076 Monteprandone (AP), Italy, Telephone: +39 0735 7091, E-mail: <u>caw@mecaer.com</u>.

