



Emergency Airworthiness Directive

AD No.: 2017-0247-E

Issued: 12 December 2017

Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

MECAER AVIATION GROUP S.P.A.

Type/Model designation(s):

NH-500D Helicopters

Effective Date: 14 December 2017

TCDS Number(s): EASA.R.144

Foreign AD: Not Applicable

Supersedure: This AD supersedes EASA Emergency AD 2016-0237-E dated 01 December 2016.

ATA 62 – Main Rotor – Blades – Inspection / Replacement

Manufacturer(s):

Breda Nardi S.p.A.

Applicability:

NH-500D helicopters, all serial numbers (s/n).

Reason:

Some operators experienced delamination or disbonding of the abrasion strip on main rotor (M/R) blades Part Number (P/N) 369D21120-505, which resulted in loss of the abrasion strip in-flight. At least one event occurred on a low time M/R blade having only 4,5 flight hours (FH).

This condition, if not detected and corrected, could lead to significant vibration, possibly resulting in loss of control of the helicopter.

To address this potential unsafe condition, the M/R blade manufacturer, Helicopter Technology Company, LLC (HTC), issued Mandatory Service Bulletin (SB) 2100-8, Revision 3 (R3), and Mecaer Aviation Group S.p.A. (MAG) issued Alert Mandatory SB BN-500-127. Consequently, EASA issued Emergency AD 2016-0237-E to require repetitive inspections of the affected M/R blade abrasion strips and, depending on findings, replacement. That AD also required replacement of the affected blades with modified blades, having a stainless steel abrasion strip installed, as terminating action for the repetitive inspections.



Since that AD was issued, MD Helicopters Inc. (MDHI), as installer of affected M/R blades on 369D/E helicopters, issued Mandatory SB369D-218/SB369E-116, which is similar to the HTC Mandatory SB, except that it affects all M/R blade s/n, and does not contain instructions to replace the abrasion strip, except when discrepancies are found. Prompted by this development, MAG issued Revision A (Rev. A) of Alert Mandatory SB BN-500-127, introducing these changes.

For reasons described above, this AD partially retains the requirements of EASA AD 2016-0237-E, which is superseded, expands the affected (to be inspected) M/R blades to all s/n, and deletes the modification requirement.

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

Required as indicated, unless accomplished previously:

Definitions:

(1) For the purpose of this AD, the following definitions apply:

M/R blade: P/N 369D21120-505, all s/n, having a 1.25 inch (31.8 mm) chord length abrasion strip installed.

Affected part: Any M/R blade having accumulated less than 700 FH since first installation on a helicopter, or since last abrasion strip replacement.

Modified part: Any M/R blade, modified by HTC, or by an HTC authorized repair facility, to have a 0.88 inch (22.4 mm) chord stainless steel abrasion strip installed.

Serviceable part: Any M/R blade that is a modified part, or is not an affected part.

The SB: MAG Alert Mandatory SB BN-500-127 Rev. A.

Repetitive Inspections:

(2) Before next flight after the effective date of this AD, or after installation of an affected part on a helicopter, whichever occurs later, and, thereafter, during each daily inspection, or at intervals not exceeding 5 FH, whichever occurs first, inspect the abrasion strip of each affected part in accordance with the instructions of PART 1 of the SB.

Corrective Action(s):

(3) If, during any inspection as required by paragraph (2) of this AD, discrepancies (as defined in the SB) are detected, before next flight, replace the affected part with a serviceable part in accordance with the instructions of PART 2 of the SB, or with an affected part in accordance with the provisions of paragraph (6) of this AD.

Terminating Action(s):

(4) Accumulation of 700 FH by an affected part, since new or since last abrasion strip replacement, as applicable, without finding any deficiencies during the latest inspection as required by paragraph (2) of this AD, constitutes terminating action for the repetitive inspections as required by paragraph (2) of this AD for that part.



- (5) Replacement on a helicopter of all affected parts with modified parts constitutes terminating action for the repetitive inspections required by paragraph (2) of this AD for that helicopter.

Parts Installation:

- (6) Installation of an affected part on a helicopter is allowed, provided that, following installation, that affected part is inspected as required by paragraph (2) of this AD.

Ref. Publications:

Mecaer Aviation Group, S.p.A. Alert Mandatory SB BN-500-127 Rev. A, dated 30 November 2017.

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

Helicopter Technology Company, LLC [Mandatory SB 2100-8R3](#), dated 29 April 2016.

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: ADs@easa.europa.eu.
4. 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 Montepandone (AP) – Italy, Telephone: +39 0735 7091, Fax: +39 0735 709 369, E-mail: caw@mecaer.com.

