



Emergency Airworthiness Directive

AD No.: 2016-0237-E

Issued: 01 December 2016

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: 02 December 2016

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).

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, issued Mandatory Service Bulletin 2100-8, Revision 3 (R3), and Mecaer Aviation Group S.p.a. (MAG) issued Alert Mandatory Service Bulletin (SB) BN-500-127.

For reasons described above, this AD requires repetitive inspections of the affected M/R blade abrasion strips and, depending on findings, replacement. This AD also requires replacement of the



affected blades with modified blades, having a stainless steel abrasion strip installed, which is terminating action for the repetitive inspections.

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

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, M/R blades P/N 369D21120-505, having s/n 6084-A001 to s/n 6084-Z999 inclusive, and s/n 6084-001A to 6084-724C inclusive; having a 1,25 inch (31,8 mm) chord length abrasion strip installed; and having accumulated less than 700 FH since first installation on a helicopter, or since last abrasion strip replacement; are collectively referred to as 'affected M/R blade' in this AD.

Note 2: MAG Alert Mandatory SB BN-500-127 is hereafter referred to as 'the SB' in this AD.

Repetitive Inspections:

- (1) Before next flight after the effective date of this AD, or after installation of an affected M/R blade (see Note 1 of this AD) 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 M/R blade in accordance with the instructions of PART 1 of the SB.

Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, discrepancies (as defined in the SB) are detected, before next flight, replace the M/R blade with a serviceable part (see Note 3 of this AD), or with a modified part (see Note 4 of this AD), in accordance with the instructions of PART 2 of the SB.

Note 3: For the purpose of this AD, a serviceable M/R blade is an affected M/R Blade (see Note 1 of this AD) that has passed an inspection in accordance with the instructions of PART 1 of the SB; or an affected M/R Blade that has exceeded 700 FH since new, or since last abrasion strip replacement.

Note 4: For the purpose of this AD, a modified M/R blade is an affected M/R blade (see Note 1 of this AD), modified by Helicopter Technology Company to have a 0,88 inch (22,4 mm) chord stainless steel abrasion strip installed; or a M/R blade, P/N 369D21120-505, having a s/n that is outside the range identified in Note 1 of this AD.

Replacement:

- (3) Within 12 months after the effective date of this AD, except as specified in paragraph (4) of this AD, replace each affected M/R blade (see Note 1 of this AD) with a modified part (see Note 4 of this AD) in accordance with the instructions of PART 2 of the SB.

Terminating Action(s):

- (4) Accumulation of 700 FH by a M/R blade, since new or since last abrasion strip replacement, as applicable, without finding any deficiencies during inspections as required by paragraph (1) of this AD, cancels the requirement of paragraph (3) to replace that M/R blade, and constitutes terminating action for the repetitive inspections required by paragraph (1) of this AD for that M/R blade.



- (5) Replacement of all affected M/R blades on a helicopter, as required by paragraph (3) of this AD, constitutes terminating action for the repetitive inspections required by paragraph (1) of this AD for that helicopter.

Parts Installation:

- (6) Installation of an affected M/R blade (see Note 1 of this AD) on a helicopter is allowed, provided that, following installation, that M/R blade is inspected as required by paragraph (1) of this AD.

Ref. Publications:

Mecaer Aviation Group, S.p.a. Alert Mandatory SB BN-500-127, dated 01 December 2016.

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.

