

Airworthiness Directive

AD No.: 2020-0013

Issued: 29 January 2020

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:

Type/Model designation(s):

AIRBUS HELICOPTERS

AS 332, AS 365, **EC 155**, EC 175, EC 225, SA 330 and SA 365 helicopters

AIRBUS HELICOPTERS DEUTSCHLAND GmbH

EC135, EC635 and MBB-BK117 helicopters

LEONARDO S.A.

AB139, AB 204, AB 205, AB 212, AB 412, AS-61, **AW139**, AW169 and **AW189** helicopters

WSK PZL – ŚWIDNIK S.A.

PZL W-3A helicopters

Effective Date: 12 February 2020

TCDS Number(s): Italy A 150 and A 270; EASA.R.002, EASA.R.006, EASA.R.007, EASA.R.009, EASA.R.010, EASA.R.105, EASA.R.114, EASA.R.150, EASA.R.509 and EASA.R.510

Foreign AD: Not applicable

Supersedure: None

ATA 26 – Fire Protection – Hand-held Fire Extinguishers – Replacement

Manufacturer(s):

Airbus Helicopters, formerly Eurocopter, Eurocopter France, Aerospatiale, Sud Aviation; Airbus Helicopters Deutschland, formerly Eurocopter Deutschland, Eurocopter Hubschrauber, Messerschmitt-Bölkow-Blohm; Airbus Helicopters Inc., formerly American Eurocopter LLC; Leonardo, S.A., formerly Finmeccanica S.A., AgustaWestland, Agusta S.p.A.; and WSK “PZL - Świdnik” S.A.

Applicability:

AS 332 C, C1, L, L1 and L2, AS 365 N2 and N3, **EC 155 B and B1**, EC 175 B, EC 225 LP, SA 330 J, and SA 365 C1, C2, C3, N and N1 helicopters, **all serial numbers (s/n);**



EC135 P1, P2, P2+, P3, T1, T2, T2+ and T3, EC635 P2+, P3, T1, T2+ and T3, and MBB-BK117 A-1, A-3, A-4, B-1, B-2, C-1, C-2 and D-2 helicopters, all s/n;

AB139, AB 204 B, AB 205 A-1, AB 212, AB 412, AB 412 EP, AS-61N, AS-61N1, AW139, AW169 and AW189 helicopters, all s/n; and

PZL W-3A and PZL W-3AS helicopters, all s/n.

Note 1: An affected part may have been installed on the helicopter during the manufacturing process (production line), or by in-service modification (either Supplemental Type Certificate, TC holder approved modification instructions, or minor modification).

Definitions:

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

The VSB: umlaut engineering GmbH Vendor Service Bulletin (VSB) P3VSB000001, issue C.

Affected part: umlaut engineering GmbH (formerly P3 Engineering GmbH) HAFEX (Halon-free) hand-held fire extinguishers, having Part Number (P/N) P3APP003010A or P/N P3APP003010C, having a manufacturing date (MM/YYYY) 03/2019, 04/2019, 05/2019, 06/2019 or 07/2019, and having a s/n as listed in the VSB.

Serviceable part: Any hand-held fire extinguisher that is not an affected part and is eligible for installation on the helicopter type design.

Reason:

Occurrences have been reported of a quality issue on certain Halon-free fire extinguishers, manufactured by umlaut engineering GmbH (formerly P3 Engineering GmbH), where the spindle geometries of the extinguishers were found to be out of tolerance. In case of previous unknown prolonged exposure (12 hours or more) to high temperature conditions of more than 68°C, this manufacturing defect could cause an undetectable seizure of the spindle that would render the fire extinguisher inoperative.

This condition, if not corrected, could prevent proper extinguishing of a fire in the cabin, possibly resulting in damage to the helicopter and injury to the occupants.

To address this potential unsafe condition, umlaut engineering, the manufacturer of the affected parts, issued the VSB to provide the necessary instructions for replacement.

For the reasons described above, this AD requires replacement of the affected parts with serviceable parts, as defined in this AD.



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

Required as indicated, unless accomplished previously:

Replacement:

- (1) During the next scheduled annual inspection of the affected part, or within 4 months after the effective date of this AD, whichever occurs later, remove that affected part from the helicopter in accordance with the instructions of the VSB and replace it with a serviceable part.

Parts Installation:

- (2) From the effective date of this AD, do not install an affected part on any helicopter.

Ref. Publications:

umlaut engineering GmbH [VSB P3VSB000001, issue C](#) dated 13 December 2019.

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

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was posted on 20 December 2019 as PAD 19-222 for consultation until 17 January 2020. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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 the type design approval holder of the affected helicopter, or umlaut engineering GmbH (formerly P3 Engineering GmbH), Blohmstraße 12, 21079 Hamburg, Germany, website: <https://www.umlaut.com/en/hafex>.

