European Union Aviation Safety Agency

Airworthiness Directive

AD No.: 2022-0239

Issued: 07 December 2022

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 or Annex Vb, Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

WSK "PZL-ŚWIDNIK" S.A.

Type/Model designation(s):

PZL W-3A helicopters

Effective Date: 21 December 2022

TCDS Number(s): EASA.R.007

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA Emergency AD 2019-0191-E dated 31 July 2019.

ATA 25 – Equipment / Furnishings – Hoist Carrier Assembly Bracket / Bolts – Inspection / Replacement

---

Manufacturer(s):

Wytwórnia Sprzętu Komunikacyjnego (WSK) "PZL-Świdnik" Spółka Akcyjna S.A. (PZL-Swidnik)

Applicability:

PZL W-3A helicopters, all manufacturer serial numbers.

Definitions:

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

Affected bracket: Hoist carrying assembly brackets, having Part Number (P/N) 39.30.205.03.01 or P/N 39.30.213.00.00.

Affected part: Bolts, having P/N 3003A-8-28-4, to attach the hoist carrying assembly bracket to the fuselage structure.

Serviceable part: Bolts, having P/N 39.30.205.09.00, to attach the hoist carrying assembly bracket to the fuselage structure.

Affected hoist installation provision: Hoist installation provisions, having P/N 39.30.205.00.01 or P/N 39.30.205.00.02.

The MB: PZL-Swidnik W-3A Mandatory Bulletin (MB) BO-37-19-296 Revision 1.

In-service modification: Modification of a helicopter in accordance with the instructions of the MB, including replacement of affected parts with serviceable parts, insertion of a washer with a chamfer under the bolt heads and, if installed, replacement of the affected bracket having P/N 39.30.205.03.01 with hoist carrying assembly bracket P/N 39.30.213.00.00, as applicable.

Groups: Group 1 helicopters are those that have a hoist type 76378 installed, except those having the in-service modification, as defined in this AD, embodied.
Group 2 helicopters are those that have (only) affected hoist installation provision installed, except those having the in-service modification embodied.
Group 3 helicopters are those that are not Group 1 or Group 2.

Reason:

An occurrence was reported where fractured affected parts, as defined in this AD, were found on a W-3A helicopter.

This condition, if not detected and corrected, could lead to detachment of the hoist carrying assembly bracket from the fuselage structure and consequent movement of the hoist carrying assembly around the axis of the two lower brackets, possibly resulting in damage to the helicopter, injury of the hoist operator, and/or loss of human(s) or cargo transported with the hoist.

To address this potential unsafe condition, PZL-Swidnik issued the MB (original issue) to provide inspection instructions, and EASA published Emergency AD 2019-0191-E to require repetitive inspections of the sealing compound around the affected bracket and, depending on findings, accomplishment of applicable corrective action(s). That AD also required repetitive replacement of affected parts.

Since that AD was issued, PZL-Swidnik designed the in-service modification and revised the MB (Revision 1) accordingly, providing in addition instructions to replace all (4) affected parts with serviceable parts, as defined in this AD.

For the reason described above, this AD partially retains the requirements and the acceptable alternative method(s) of compliance of EASA Emergency AD 2019-0191-E, which is superseded, introduces the in-service modification as (optional) terminating action for the repetitive inspections and repetitive bolt replacements, as required by this AD, and also new requirements for accomplishment of the in-service modification.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) For Group 1 helicopters: Before next flight after 02 August 2019 [the effective date of EASA Emergency AD 2019-0191-E], inspect the sealing compound around the affected bracket edge

and near the nuts and, if no cracked compound is detected, replace all (4) affected parts with new (not previously installed on any helicopter) affected parts or with serviceable parts in accordance with the instructions of the MB.

(2) If, during the bolt replacement as required by paragraph (1) of this AD, not all (4) affected parts were replaced with serviceable parts, within 25 flight hours (FH) after that replacement and, thereafter, at intervals not to exceed 25 FH, inspect the sealing compound around the affected bracket in accordance with the instructions of the MB.

Corrective Action(s):

(3) If, during any inspection as required by paragraph (1) or (2) or as specified in paragraph (6.1) of this AD, as applicable, cracked sealing compound is detected, before next flight, remove the hoist in accordance with the instructions of the MB, or remove the affected hoist installation provision and the affected bracket and contact PZL-Swidnik for damage assessment and approved corrective action instructions, or, in case of findings, repair instructions, as applicable, and accomplish those instructions accordingly.

Credit:

(4) Inspections, bolt replacements and corrective action(s) on a helicopter, accomplished before the effective date of this AD in accordance with the instructions of PZL-Swidnik W-3A MB BO-37-19-296 at original issue, is an acceptable method to comply with the initial requirements of this AD.

Repetitive Replacement:

(5) If, during the affected parts replacement as required by paragraph (1) of this AD, not all (4) affected parts were replaced with serviceable parts, within 800 hoist cycles after that replacement and, thereafter, at intervals not to exceed 800 hoist cycles, replace all (4) affected parts with new (not previously installed on any helicopter) affected parts or with serviceable parts in accordance with the instructions of the MB.

Alternative Method:

(6) In lieu of replacement of the affected parts as required by paragraph (1) or (5) of this AD, as applicable, it is allowed to operate the helicopter, provided that one of the actions as specified in paragraph (6.1) or (6.2) is accomplished.

(6.1) Deactivate the installed hoist and install placards on the applicable control switches of the circuit breakers panel, prohibiting use of the hoist and, thereafter, before each flight, inspect the sealing compound around the affected bracket for cracks in accordance with the instructions of the MB.

(6.2) Remove the hoist from the helicopter in accordance with the instruction of the MB. After this removal, the helicopter is considered to be Group 2.

Modification:

(7) For Group 1 helicopters: Before exceeding 800 hoist cycles after accomplishment of the latest affected parts replacement as required by paragraph (1) or (5) of this AD, as applicable,

modify the helicopter by embodiment of the in-service modification, as defined in this AD. After this modification, the helicopter is considered to be Group 3.

Terminating Action:

(8) Embodiment on a helicopter of the in-service modification, as defined in this AD, constitutes terminating action for the repetitive inspections and replacements as required by paragraphs (2) and (5) of this AD for that helicopter. After this embodiment, the helicopter is considered to be Group 3.

Parts Installation:

(9) For Group 1 helicopters: For reinstallation or reactivation of a hoist, accomplish one of the actions as specified in either paragraph (9.1) or (9.2), as applicable.

(9.1) Helicopters from which the hoist has been removed as required by paragraph (3) of this AD: From 02 August 2019 [the effective date of EASA Emergency AD 2019-0191-E] reinstallation of a hoist is allowed, provided that before reinstallation, PZL-Swidnik is contacted for damage assessment and approved corrective action instructions, or, in case of findings, repair instructions, as applicable, and those instructions are accomplished accordingly. Unless the helicopter is, in parallel with this reinstallation, modified by embodiment of the in-service modification as defined in this AD, all repetitive inspections, replacements and applicable corrective actions have to be accomplished as required by this AD, because the helicopter is still considered to be Group 1. After embodiment on a helicopter of the in-service modification, as defined in this AD, that helicopter is considered to be Group 3.

(9.2) Helicopters on which the hoist has been appropriately deactivated and corresponding placards have been installed which prohibit use of the hoist as specified in paragraph (6.1) of this AD: From 02 August 2019 [the effective date of EASA Emergency AD 2019-0191-E] reactivation of a hoist is allowed, provided that, before this reactivation, the sealing compound around the affected bracket is inspected in accordance with the instructions of the MB and, in case cracked compound is detected, PZL-Swidnik is contacted for approved damage assessment instructions, or, in case of findings, repair instructions, as applicable, and these are accomplished accordingly. When no cracked compound is detected, all (4) affected parts must be replaced with new (not previously installed on any helicopter) affected parts or with serviceable parts in accordance with the instructions of the MB and, thereafter, all repetitive inspections, replacements and corrective actions, as applicable, are to be accomplished as required by this AD, because the helicopter remains Group 1 after this reactivation. Following a reactivation after that a helicopter has (also) embodied the in-service modification as defined in this AD, that helicopter is considered to be Group 3.

(10) For Group 2 helicopters: From 02 August 2019 [the effective date of EASA Emergency AD 2019-0191-E], installation of a hoist is allowed, provided that, before installation, the sealing compound around the affected bracket is inspected in accordance with the instructions of the MB and, in case cracked sealing compound is detected, PZL-Swidnik is contacted for damage assessment and approved corrective action instructions, or, in case of findings, repair instructions, as applicable, and those instructions are accomplished accordingly. When no

cracked sealing compound is detected, all (4) affected parts must be replaced with new (not previously installed on any helicopter) affected parts or with serviceable parts in accordance with the instructions of the MB and, thereafter, all repetitive inspections, replacements and corrective actions, as applicable, are to be accomplished as required by this AD, because after this installation the helicopter is considered to be Group 1. In case, during this installation, the helicopter has (also) embodied the in-service modification as defined in this AD, that helicopter is considered to be Group 3.

(11) For Group 3 helicopters: From 02 August 2019 [the effective date of EASA Emergency AD 2019-0191-E], it is allowed to install a hoist or (only) affected hoist installation provisions, provided that following this installation, all repetitive inspections, replacements and applicable corrective actions are accomplished as required by this AD, because the helicopter is, after this installation, considered to be Group 1 or Group 2, as applicable. In case, during this installation, the helicopter has (also) embodied the in-service modification as defined in this AD, that helicopter remains Group 3.

Ref. Publications:

PZL-Swidnik W-3A MB BO-37-19-296 original issue dated 30 July 2019, or Revision 1 dated 21 October 2022.

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. Based on the required actions and the compliance time, EASA has decided to issue a Final AD, postponing the public consultation process, with Request for Comments after publication.

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. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.

5. For any question concerning the technical content of the requirements in this AD, please contact: WSK "PZL- Świdnik" S.A., Al. Lotników Polskich 1, 21-045 Świdnik, Poland, Telephone: (+48) 81 722 6140, E-mail: PL-CustomerSupport.AW@leonardo.com.