

Airworthiness Directive

AD No.: 2024-0166

Issued: 21 August 2024

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 M.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 M.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: Type/Model designation(s):

WSK "PZL-ŚWIDNIK" S.A. PZL W-3A helicopters

Effective Date: 04 September 2024

TCDS Number(s): EASA.R.007

Foreign AD: Not applicable

Supersedure: None

ATA 62 – Rotors – Main Rotor Blade Attachment Bolts – Inspection

Manufacturer(s):

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

Applicability:

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

Definitions:

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

Affected part: Main rotor blade attachment bolts, having Part Number (P/N) 37.21.000.50.00.

Serviceable part: Affected part which is new (never installed before); or which accumulated 0 flight hours (FH) after having passed the inspection (no defects found), or after being repaired and having the protective coating renewed or applied, as applicable, in accordance with the instructions of the ASB (as defined in this AD).

Note 1: Application or renewal of the protective coating has to be done in accordance with the instructions of the PZL-Swidnik documents 020.24.00/00.A and 020.25.00/00.A.

The ASB: PZL-Swidnik W-3A Alert Service Bulletin (ASB) ASB-37-24-347.



Reason:

During replacement of the main rotor blades on a W-3A helicopter, corrosion of the main rotor blade attachment bolts was observed. The affected bolts had been installed for 7 months and had accumulated 243 FH, which is far below the defined service life limit of 2 700 FH for this critical part.

Corrosion on such bolts and its further development, if not detected and corrected, could possibly lead to cracks, and failure of one or more of such bolts, possibly resulting in loss of a main rotor blade, which would lead to loss of control of the helicopter.

To address this potential unsafe condition, PZL-Swidnik issued the ASB, as defined in this AD, providing instructions for repetitive inspection of the main rotor blade attachment bolts and for repair or replacement of corroded bolts, as applicable.

For the reasons described above, this AD requires repetitive inspection of each affected part (as defined in this AD) and, depending on findings, repair or replacement. This AD also requires reporting of all inspection results and regulates the installation of affected parts.

This AD is considered to be an interim action and further AD action may follow.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Inspection(s):

(1) Within 100 FH or 3 months, whichever occurs first after the effective date of this AD and, thereafter, at intervals as specified in Table 1 of this AD, remove, clean and inspect each affected part in accordance with the instructions of the ASB.

Table 1 – Inspection Intervals

	Inspection Results and/or Action(s) Accomplished during the Last Inspection	Interval (FH or calendar time, whichever occurs first)
А	No defects of any bolt and no damaged or missing protective coating of any bolt was found or The damaged or missing protective coating of each discrepant and each repaired bolt has been renewed / applied or All the discrepant bolts or all the affected parts have been replaced with serviceable parts, as defined in this AD	Within 300 FH or 12 months
В	All (other) cases not included in A	Within 25 FH or 6 months



Corrective Action(s):

(2) If, during any inspection of an affected part as required by paragraph (1) of this AD, any defect as defined in the Table 2 of this AD, is found, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the ASB.

Table 2 – Corrective Actions

Defect(s) Found on a Bolt during an Inspection	Corrective Action
Surface corrosion, pitting corrosion or mechanical damage of the bolt that is within the acceptable / repairable criteria of Attachment 1 of the ASB	Repair that bolt in accordance with the instructions of Attachment 2 of the ASB, as applicable (see Note 2 of this AD) or Replace that bolt with a serviceable part
Surface corrosion, pitting corrosion or mechanical damage of the bolt that is beyond the acceptable / repairable criteria of Attachment 1 of the ASB	Replace that bolt with a serviceable part

Note 2: The instructions for the repair of a bolt include required post-repair dimensional checks, as specified in Attachment 2 of the ASB.

Reporting:

(3) Within 30 days after accomplishment of any inspection as required by paragraph (1) of this AD, report the inspection results to PZL-Swidnik. Using the Form attached to the ASB is an acceptable method to comply with this requirement.

Terminating Action:

(4) None.

Part(s) Installation:

(5) 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, it is inspected periodically at intervals as specified in Table 1 of this AD (see Note 3 of this AD).

Note 3: Removal of an affected part from a helicopter and subsequent reinstallation of that part on the same helicopter, at the same position, accomplished during a single maintenance visit, is not considered as 'install' as specified in paragraph (5) of this AD.

Ref. Publications:

PZL-Swidnik ASB ASB-37-24-347 original issue dated 11 July 2024.



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 22 July 2024 as PAD 24-090 for consultation until 19 August 2024. No comments were received during the consultation period.
- 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 <u>EU aviation safety reporting system</u>. 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.

