Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 24-090
Issued: 22 July 2024

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below. All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder’s Name: WSK “PZL-ŚWIDNIK” S.A.
Type/Model designation(s): PZL W-3A helicopters

Effective Date: [TBD - standard: 14 days after AD issue date]
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.

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 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

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

<table>
<thead>
<tr>
<th>Defect(s) Found on a Bolt During an Inspection</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface corrosion, pitting corrosion or mechanical damage of the bolt that is within the acceptable / repairable criteria of Attachment 1 of the ASB</td>
<td>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</td>
</tr>
<tr>
<td>Surface corrosion, pitting corrosion or mechanical damage of the bolt that is beyond the acceptable / repairable criteria of Attachment 1 of the ASB</td>
<td>Replace that bolt with a serviceable part</td>
</tr>
</tbody>
</table>

Note 2: The instructions for repair of a bolt include 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.

Parts 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-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. This Proposed AD will be closed for consultation on 19 August 2024.

2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.

4. For any question concerning the technical content of the requirements in this PAD, 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.