Airworthiness Directive

AD No.: 2018-0242

Issued: 08 October 2018

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:
POLSKIE ZAKLADY LOTNICZE Sp. z o.o.

Type/Model designation(s):
PZL M28 05 aeroplanes

Effective Date: 22 November 2018

TCDS Number(s): EASA.A.058

Foreign AD: Not applicable

Supersedure: None

ATA 28 – Fuel – Fuel Tank Electrical Harness – Inspection / Replacement

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Manufacturer(s):
Polskie Zaklady Lotnicze Sp. z o.o. (PZL)

Applicability:
PZL M28 05 aeroplanes, manufacturer serial numbers (s/n) AJE003-01 through AJE00347 (inclusive), except s/n AJE00344.

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

The SB: PZL M28 05 Service Bulletin (SB) No. E/12.141/2018.

Affected part: Electrical harness listed by Part Numbers (P/N) in Section III of the SB.

Serviceable part: An affected part which is new.

Reason:
During accomplishment of maintenance on an M28 05 military version airplane, torn pieces of thermo-shrinkable tubes were found in the header section of the main fuel tank. These tubes are installed on electrical harnesses located in the fuel tanks and serve as marking and protection devices against mechanical damage during manufacturing and servicing. Pieces of these tubes may travel with the fuel flow and may block the jet pump or reduce its performance, particularly in the

centre-wing fuel tank, in which the jet pump is the only way of further transfer of fuel to the engine. Subsequent investigation determined that degradation of the tube material was caused by a manufacturing deficiency, leading to insufficient material resistance against mechanical damage when a tube is located in a fuel.

This condition, if not detected and corrected, could lead to reduced fuel supply to the engines, inability to use all the fuel in fuel tanks and reduced available engine power, resulting in reduced aeroplane performance.

To address this potentially unsafe condition, PZL identified the batch of aeroplanes that are potentially equipped with thermo-shrinkable tubes having this manufacturing defect, and issued the SB providing inspection and replacement instructions.

For the reasons described above, this AD requires a one-time inspection of the electrical harnesses located in the fuel tanks and, depending on findings, replacement of the affected harness.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) Within 200 flight hours or 400 flight cycles or 8 months, whichever occurs first after the effective date of this AD, inspect each affected part located in the centre and outer wing fuel tanks in accordance with the instructions of the SB.

Corrective Action(s):

(2) If, during the inspection as required by paragraph (1) of this AD, any discrepancy is detected, as defined in the SB, before next flight, contact PZL to obtain serviceable parts and replace each damaged affected part with a serviceable part in accordance with the instructions of the SB.

Parts Installation:

(3) From the effective date of this AD, it is allowed to install an affected part in a centre or outer fuel tank, provided that it is a serviceable part.

Ref. Publications:

Polskie Zaklady Lotnicze Sp. z o.o. SB No. E/12.141/2018 dated 15 May 2018.

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 17 September 2018 as PAD 18-129 for consultation until 15 October 2018. 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 EU aviation safety reporting system.

5. For any question concerning the technical content of the requirements in this AD, please contact: janusz.pietruszka@lmco.com or adam.dziurgot@lmco.com or pzl.lm@lmco.com, Polskie Zaklady Lotnicze Sp. z o.o., Wojska Polskiego 3, 39-300 Mielec, Poland.