



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0473; Project Identifier 2018-CE-058-AD; Amendment 39-21308; AD 2020-22-12]

RIN 2120-AA64

Airworthiness Directives; Polskie Zakłady Lotnicze Sp. z o.o Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Polskie Zakłady Lotnicze Sp. z o.o. Model PZL M28 05 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as defective thermo-shrinkable tubes installed on the electrical harnesses located in the fuel tanks. 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. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Polskie Zakłady Lotnicze Sp. z o.o., Wojska Polskiego 3, 39-300 Mielec, Poland, telephone: +48 17 743 1901, email: pzl.lm@lmco.com, internet: <http://www.pzlmielec.pl/>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0473.

Examining the AD Docket

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0473; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the MCAI, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Doug Rudolph, Aerospace Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain serial-numbered Polskie Zakłady Lotnicze Sp. z o.o. Model PZL M28 05 airplanes. The NPRM published in the *Federal Register* on May 14, 2020 (85 FR 28893). The NPRM proposed to correct an unsafe condition for the specified products and was based on MCAI originated by the European

Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA issued AD No. 2018-0242, dated October 8, 2018 (referred to after this as “the MCAI”), which states:

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 [service bulletin] SB providing inspection and replacement instructions.

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

Polskie Zakłady Lotnicze Sp. z o.o. informed the FAA the potential for damage to the thermo-shrinkable tubes does not progress with time. Therefore, the FAA determined repetitive inspections are not required. You may examine the MCAI on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0473.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA’s response to each comment.

Support for the NPRM

An individual commenter supported the NPRM.

Request to Change the Cost of Compliance

Another individual commenter requested the FAA increase the estimated number of labor hours in the cost of compliance. The commenter stated the number of hours should be increased from 3 to at least 44 to 48, based on the time and personnel needed to open the center wing panels, properly shore the engines, open the tank covers, perform the inspection, and complete the close up. The commenter further stated that this would not include costs for any de-fueling, de-puddling, re-fueling, or leak checks that may need to be done.

The FAA disagrees. The cost analysis in AD rulemaking actions typically includes only the costs associated with complying with the AD. In the NPRM, the FAA estimated 3 work hours to perform the inspection and 60 work hours, if necessary, to replace the harness, based on information from the design approval holder. The compliance time for this AD allows the operator do this inspection at the same time as other maintenance when the airplane has been prepared for other tasks. No changes were made to the proposed AD based on this comment.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule as proposed.

Related Service Information under 1 CFR Part 51

The FAA reviewed Polskie Zaklady Lotnicze Sp. z o.o. Service Bulletin No. E/12.141/2018, dated May 15, 2018. The service information contains procedures for inspecting the thermo-shrinkable tubes on the electrical harnesses in the center and outer wing fuel tanks for damage and replacing any electrical harness with damaged thermo-shrinkable tubes. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD will affect 15 products of U.S. registry. The FAA also estimates that it will take about 3 work-hours per product to comply with the inspection requirement of this AD. The average labor rate is \$85 per work-hour.

Based on these figures, the FAA estimates the cost of the AD on U.S. operators to be \$3,825, or \$255 per product.

In addition, the FAA estimates that any necessary follow-on replacement action will take about 60 work-hours and require parts costing \$5,000, for a cost of \$10,100 per electrical harness. The FAA has no way of determining the number of airplanes that may need these actions.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a

substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive

(AD):

2020-22-12 **Polskie Zakłady Lotnicze Sp. z o.o.**: Amendment 39-21308; Docket No.

FAA-2020-0473; Project Identifier 2018-CE-058-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Polskie Zakłady Lotnicze Sp. z o.o. Model PZL M28 05 airplanes, serial numbers AJE00301 through AJE00343, and AJE00345 through AJE00347, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 28: Fuel Tank.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as defective thermo-shrinkable tubes installed on the electrical harnesses located in the fuel tanks. The FAA is issuing this AD to prevent broken pieces of the thermo-shrinkable tubes from blocking the jet pump, reducing fuel supply to the engines, and resulting in the inability to use all the fuel in the fuel tanks. This condition could lead to reduced engine power and airplane performance.

(f) Actions and Compliance

Unless already done, do the following actions in paragraphs (f)(1) and (2) of this AD:

(1) Within the next 200 hours time-in-service (TIS) after the effective date of this AD or within the next 8 months after the effective date of this AD, whichever occurs first:

(i) Inspect each electrical wire harness in the center wing and the left-hand and right-hand outer wing fuel tanks for cracking, tears, and seizing of the thermo-shrinkable tubes in accordance with paragraphs II.1 through 2 a) of the Procedure for Bulletin Execution section in Polskie Zakłady Lotnicze Sp. z o.o. Service Bulletin No. E/12.141/2018, dated May 15, 2018.

(ii) If there is a tear or any cracking in or any seizing of an electrical wire harness thermo-shrinkable tube, before further flight, replace the harness in accordance with section II. a) Replacement of harness KL8 (KP), II. b) Replacement of Harness KL9 (KP9), or II. c) Replacement of harness KL10 (KP10), as applicable, of the Procedure for

Bulletin Execution in Polskie Zakłady Lotnicze Sp. z o.o. Service Bulletin No.

E/12.141/2018, dated May 15, 2018.

(2) As of the effective date of this AD, do not install any electrical wire harness part number 28.14.7205.073.000, 28.14.7205.074.000, 28.14.7205.075.000, 28.14.7205.076.000, 28.14.7205.077.000, or 28.14.7205.078.000, that has more than zero hours TIS on any airplane, unless it has passed the inspection required by paragraph (f)(1)(i) of this AD.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Doug Rudolph, Aerospace Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(h) Related Information

Refer to European Union Aviation Safety Agency (EASA) AD No. 2018-0242, dated October 8, 2018, for more information. You may examine the EASA AD in the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0473.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Polskie Zakłady Lotnicze Sp. z o.o. Service Bulletin No. E/12.141/2018, dated May 15, 2018.

(ii) [Reserved]

(3) For Polskie Zakłady Lotnicze Sp. z o.o. service information identified in this AD, contact Polskie Zakłady Lotnicze Sp. z o.o., Wojska Polskiego 3, 39-300 Mielec, Poland, telephone: +48 17 743 1901, email: pzl.lm@lmco.com, internet: <http://www.pzlmielec.pl>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on October 19, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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