DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0818; Project Identifier MCAI-2020-00987-A; Amendment 39-21381; AD 2021-01-05]

RIN 2120-AA64

Airworthiness Directives; Pilatus Aircraft Ltd. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Pilatus Aircraft Ltd. (Pilatus) Model PC-24 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 identifies the unsafe condition as electrical harness installations on PC-24 airplanes that are not in compliance with the approved design. This unsafe condition could lead to wire chafing and potential arcing or failure of wires having the incorrect length, possibly resulting in loss of system redundancy, or generation of smoke and smell, or loss of power plant fire protection function. This AD requires modifying the electrical harness installation. 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 Pilatus Aircraft Ltd., CH-6371, Stans, Switzerland; phone: +41 848 24 7 365; email: techsupport.ch@pilatus-aircraft.com; website: http://www.pilatus-aircraft.com/. You may view this service information at the FAA, Airworthiness Products Section, Operational
Examining the AD Docket

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0818; 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, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, Missouri 64106; phone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

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 Pilatus Model PC-24 airplanes. The NPRM published in the Federal Register on September 17, 2020 (85 FR 58002). The NPRM was prompted by MCAI originated by the European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA has issued EASA AD No. 2020-0158, dated July 16, 2020 (referred to after this as “the MCAI”), to address the unsafe condition on these products. The MCAI states:

During production, electrical harness installations on some PC-24 aeroplanes were found not to comply with the approved design.

This condition, if not corrected, could lead to wire chafing and potential arcing, or to failure of wires having the incorrect length, possibly resulting in loss of system
redundancy, or generation of smoke and smell, or loss of power plant fire protection function.

To address this potential unsafe condition, Pilatus issued the [service bulletin] SB, providing instructions to improve the electrical harness installations in the nose bay, cockpit, fuselage, wing fairing and rear fuselage areas.

For the reason described above, this [EASA] AD requires modification of the electrical harness installations.

The incorrect length wires are too short in length and do not have appropriate slack, which could lead to wires being pulled loose from the terminals during flight or ground operation. Generation of smell refers to the smell from electrical arcing. You may examine the MCAI in the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0818.

In the NPRM, the FAA proposed to require modifying the electrical harness installation. The FAA is issuing this AD to address the unsafe condition on these products.

**Discussion of Final Airworthiness Directive**

**Comments**

The FAA received no comments on the NPRM or on the determination of the costs.

**Conclusion**

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

**Related Service Information under 1 CFR Part 51**

The FAA reviewed Pilatus PC-24 Service Bulletin No. 91-001, dated April 7, 2020. The service information specifies procedures necessary to improve the electrical harness installation in the nose bay, cockpit, avionics rack, fuselage, wing fairing, and
rear fuselage. 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 36 products of U.S. registry. The FAA also estimates that it will take 20 work-hours per product to comply with the requirements of this AD. The average labor rate is $85 per work-hour. Required parts will cost about $75 per product.

Based on these figures, the FAA estimates the cost of this AD on U.S. operators at $63,900, or $1,775 per product.

The FAA has included all costs in this cost estimate. According to the manufacturer, however, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

**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 that 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:

2021-01-05 Pilatus Aircraft Ltd.: Amendment 39-21381; Docket No. FAA-2020-0818; Project Identifier MCAI-2020-00987-A.

(a) **Effective Date**

   This airworthiness directive (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 Pilatus Aircraft Ltd. Model PC-24 airplanes, serial numbers 101 through 160 inclusive, certificated in any category.

(d) **Subject**

   Joint Aircraft System Component (JASC) Code 2497, ELECTRICAL POWER SYSTEM WIRING; 3197, INSTRUMENT SYSTEM WIRING.
(e) Unsafe Condition

This AD was prompted by electrical harness installations on some PC-24 airplanes in production that did not comply with the approved design. The FAA is issuing this AD to prevent wire chafing and potential arcing or failure of wires having the incorrect length. The unsafe condition, if not addressed, could result in loss of system redundancy, electrical arcing, or loss of power plant fire protection.

(f) Actions and Compliance

Unless already accomplished, during the next annual inspection after the effective date of this AD or within 12 months after the effective date of this AD, whichever occurs later, modify the electrical harness installation in accordance with sections 3.A. through 3.H. of the Accomplishment Instructions in Pilatus PC-24 Service Bulletin No. 91-001, dated April 7, 2020.

(g) Alternative Methods of Compliance (AMOCs)

(1) 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; phone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov.

(2) 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

(1) Refer to European Union Aviation Safety Agency (EASA) AD No. 2020-0158, dated July 16, 2020, for more information. You may examine the EASA AD at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0818.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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.


   (ii) [Reserved]

(3) For Pilatus Aircraft Ltd service information identified in this AD, contact Pilatus Aircraft Ltd., CH-6371, Stans, Switzerland; phone: +41 848 24 7 365; email: techsupport.ch@pilatus-aircraft.com; website: http://www.pilatus-aircraft.com/.

(4) You may view this service information at 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 December 30, 2020.

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

[FR Doc. 2021-03511 Filed: 2/22/2021 8:45 am; Publication Date: 2/23/2021]