



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0813; Product Identifier 2019-CE-040-AD; Amendment 39-21387; AD 2021-02-04]

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 Pilatus Aircraft Ltd. (Pilatus) Model PC-12/47E airplanes. 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 inboard flap fairings aft (IFFAs) having an incorrect shape, which may result in chafing between the IFFA and the associated front inboard tension rod. This AD requires an inspection of the IFFAs for the correct shape and chafing between the IFFA and the associated front inboard tension rod, with corrective action as necessary. This condition could lead to failure of the inboard flap drive arm with consequent asymmetric flap extension, resulting in reduced control of the airplane. 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., Customer Support PC-12, CH-6371 Stans, Switzerland; phone: +41 41 619 33 33; fax: +41 41 619 73 11; email: supportPC12@pilatus-aircraft.com; website: <https://www.pilatus-aircraft.com>. You may review this referenced 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 at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0813.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0813; 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, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 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 all Pilatus Model PC-12/47E airplanes. The NPRM published in the *Federal Register* on September 16, 2020 (85 FR 57804). In the NPRM, the FAA proposed to require an inspection of the IFFAs for the correct shape and chafing between the IFFA and the associated front inboard tension rod, with corrective action as necessary.

The NPRM was based on MCAI from the European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA issued AD No.: 2019-0231, dated September 13, 2019 (referred to after this as “the MCAI”), to correct an unsafe condition for Pilatus Model PC-12/47E airplanes. The MCAI states:

On the final assembly line of PC-12/47E aeroplanes, IFFAs were detected having an incorrect shape. As a consequence, chafing between the IFFA and the associated front inboard tension rod could occur, may cause corrosion of the bare rod aluminium tube and reduce aluminium thickness.

This condition, if not detected and corrected, could lead to failure of the inboard flap drive arm with consequent asymmetric flap extension, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Pilatus issued the [service bulletin] SB to provide inspection and modification instructions.

For the reason described above, this [EASA] AD requires a one-time inspection of both IFFA and, depending on findings, a follow-on inspection of the associated front inboard tension rod for chafing, and modification or replacement of affected parts.

You may examine the MCAI at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0813.

Discussion of Final Airworthiness Directive

Comments

The FAA received two comments from Pilatus. The following presents the comments received on the NPRM and the FAA's response to each comment.

Pilatus requested the FAA reduce the applicability of the proposed AD from all Model PC-12/47E airplanes to Model PC-12/47E airplanes with serial number (S/N) 1576 and higher. Pilatus stated that due to an engineering change in 2014, the left-hand (LH) IFFA, part number (P/N) 557.52.12.223, and the right-hand (RH) IFFA, P/N 557.52.12.224, introduced on airplanes with S/N 1576 and higher, have different attachment hole positions and a maximum hole position difference of more than 12mm. As a result, it is not physically possible to install P/Ns 557.52.12.223 and 557.52.12.224 on airplanes with an S/N lower than 1576.

The FAA partially agrees. The commenter is correct that the affected IFFAs cannot be installed on Model PC-12/47E airplanes with an S/N lower than 1576. The FAA has revised paragraph (f) of this AD to limit the inspection of the IFFAs to airplanes with an S/N 1576 and higher.

Pilatus acknowledged that tension rod P/N 527.52.12.135 can be installed on all Model PC-12/47E airplanes but requested the FAA limit the tension rod inspection for

airplanes with an S/N lower than 1576 to only those with maintenance records showing that the tension rod had been installed.

The FAA partially agrees. The FAA has revised the tension rod inspection to limit its scope for airplanes with an S/N lower than 1576. Because the tension rods are not life-limited parts, there is no regulatory requirement for them to be serialized or for operators to record or retain information about the part's traceability. Therefore, operators would be unable to comply with, and the FAA would be unable to enforce, the change requested by the commenter, as maintenance records may not identify if a tension rod was removed from an airplane with an S/N 1576 or higher. Instead, the FAA has changed the AD so that the inspection of the tension rod is required for all airplanes with a S/N 1576 or higher and for airplanes with a S/N 1001 through 1575 if tension rod P/N 527.52.12.135 is installed.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for the changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information under 1 CFR Part 51

The FAA reviewed Pilatus PC-12 Service Bulletin No: 27-026, dated July 10, 2019 (Pilatus SB No. 27-026). The service information specifies procedures for inspecting and correcting chafing between the left and right IFFAs and the associated front inboard tension rods. 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 ADDRESSES.

Differences Between this AD and the MCAI

The MCAI only requires inspection of the tension rods if the IFFAs are modified because they have been found to have the incorrect shape. Due to the length of time between manufacture and the issuance of this AD, operators could have installed an affected tension rod onto an airplane that was not manufactured with the defective part.

Therefore, this AD requires inspection for chafing damage on the tension rods on all Model PC-12/47E airplanes that have an affected tension rod installed.

Costs of Compliance

The FAA estimates that this AD will affect 18 products of U.S. registry. The FAA also estimates that it will take about 2.5 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 \$1,600 per product.

Based on these figures, the FAA estimates the cost of this AD on U.S. operators will be \$32,634 or \$1,813 per product.

The FAA has included all costs in this cost estimate. According to the manufacturer, however, all or 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.

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:

2021-02-04 Pilatus Aircraft Ltd.: Amendment 39-21387; Docket No. FAA-2020-0813; Product Identifier 2019-CE-040-AD.

(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-12/47E airplanes, all serial numbers (S/Ns), certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 2700: Flight Controls.

(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 inboard flap fairings aft (IFFAs) having an incorrect shape. The FAA is issuing this AD to prevent chafing between the IFFA and the front inboard tension rod, and consequent corrosion of the bare rod aluminum tube and reduced aluminum thickness. This condition, if not corrected, could lead to failure of the inboard flap drive arm, asymmetric flap extension, and reduced control of the airplane.

(f) Actions and Compliance

(1) For airplanes with a S/N 1576 and higher, unless already done, within 100 hours time-in-service (TIS) after the effective date of this AD or within 6 months after the effective date of this AD, whichever occurs first, inspect the left-hand (LH) and right-hand (RH) IFFAs for correct shape and clearance with the LH and RH tension rods by following step 3.B.(1) and Figures 2 and 3 of the Accomplishment Instructions – Aircraft in Pilatus PC-12 Service Bulletin No: 27-026, dated July 10, 2019 (Pilatus SB 27-026).

(i) If the shape of the LH or RH IFFA is incorrect or if the clearance between the IFFA and the tension rod is less than 5 mm (0.2 inch), before further flight, modify the IFFA and inspect the tension rods for chafing by following section 3.C. of the Accomplishment Instructions – Aircraft in Pilatus SB 27-026.

(ii) If the shape of the LH and RH IFFAs is correct and the clearance between the IFFA and the tension rod is at least 5 mm (0.2 inch), before further flight, inspect the front inboard LH and RH tension rods for chafing by following step 3.C.(12)(a) of the Accomplishment Instructions—Aircraft in Pilatus SB 27-026. If the LH or RH tension rod has any chafing, before further flight, replace the tension rod by following step 3.C.(12)(b) of the Accomplishment Instructions—Aircraft in Pilatus SB 27-026.

(2) For airplanes with a S/N 1001 through S/N 1575, inclusive, that have a tension rod part number (P/N) 527.52.12.135 installed, unless already done, within 100 hours TIS after the effective date of this AD or within 6 months after the effective date of this AD, whichever occurs first, inspect the front inboard LH and RH tension rods for chafing by following step 3.C.(12)(a) of the Accomplishment Instructions—Aircraft in Pilatus SB 27-026. If the LH or RH tension rod has any chafing, before further flight, replace the

tension rod by following step 3.C.(12)(b) of the Accomplishment Instructions—Aircraft in Pilatus SB 27-026.

(3) For all Model PC-12/47E airplanes, as of the effective date of this AD, do not install on any airplane an LH IFFA P/N 557.52.12.223, RH IFFA P/N 557.52.12.224, or tension rod P/N 527.52.12.135 unless the part has been inspected and all corrective actions have been taken as required by 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, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, Missouri 64106; phone: (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

(1) Refer to MCAI European Union Aviation Safety Agency AD No. 2019-0231, dated September 13, 2019, for related information. You may examine the MCAI at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0813.

(2) For service information related to this AD, contact Pilatus Aircraft, Ltd., Customer Support PC-12, CH-6371 Stans, Switzerland; phone: +41 41 619 33 33; fax: +41 41 619 73 11; email: supportPC12@pilatus-aircraft.com; website: <https://www.pilatus-aircraft.com>. You may review this referenced 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.

(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.

(i) Pilatus Service Bulletin No: 27-026, dated July 10, 2019.

(ii) [Reserved]

(3) For Pilatus Aircraft Ltd. service information identified in this AD, contact Pilatus Aircraft, Ltd., Customer Support PC-12, CH-6371 Stans, Switzerland; phone: +41 41 619 33 33; fax: +41 41 619 73 11; email: supportPC12@pilatus-aircraft.com; website: <https://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 January 6, 2021.

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

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