DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-1058; Product Identifier 2018-CE-051-AD; Amendment 39-19646; AD 2019-10-07]

RIN 2120-AA64

Airworthiness Directives; Pilatus Aircraft Ltd. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final Rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Pilatus Aircraft Ltd. Models PC-6, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6/A, PC-6/A-H1, PC-6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, PC-6/C1-H2, PC-6-H1, and PC-6-H2 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued 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 sheared or missing rivets on the horizontal stabilizer hinge bracket assemblies. The FAA is issuing this AD to require actions 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 certain publications listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

For service information identified in this AD, contact PILATUS Aircraft Ltd., Customer Technical Support (MCC), P.O. Box 992, CH-6371 Stans, Switzerland; phone: +41 (0)41 619 67 74; fax: +41 (0)41 619 67 73; email: techsupport@pilatus-aircraft.com; Internet: http://www.pilatus-aircraft.com. You may view this referenced service information at the FAA, Policy and Innovation Division, 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 http://www.regulations.gov by searching for Docket No. FAA-2018-1058.

FOR FURTHER INFORMATION CONTACT: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Standards 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 Pilatus Aircraft Ltd. Models PC-6, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6/A, PC-6/A-H1, PC-6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, PC-6/C1-H2, PC-6-H1, and PC-6-H2 airplanes. The NPRM was published in the Federal Register on December 26, 2018 (83 FR 66175). The NPRM proposed to correct an unsafe condition for the specified products and was based on MCAI AD No. 2018-0217, dated October 10, 2018, issued by the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community. The MCAI states:
During a routine inspection, the rivets of the hinge bracket assemblies on a Pilatus PC-6 were found to be sheared or missing. Investigation results identified that this was most likely due to application of too much force to the ends of the horizontal stabilizer during ground handling.

This condition, if not detected and corrected, could lead to failure of the primary horizontal stabilizer load path and consequent separation of the horizontal stabilizer, possibly resulting in loss of control of the aeroplane.

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

For the reasons described above, this [EASA] AD requires a one-time inspection of the affected parts and the horizontal stabilizer front spar attachment area and, depending on findings, accomplishment of applicable corrective action(s). This [EASA] AD also requires, before installation, inspection of, and, depending on findings, corrective action(s) on, affected parts held as spare.

The amount of force to the ends of the horizontal stabilizer cannot be quantified; however, fleet experience shows that repetitive pushing or pulling on the horizontal stabilizer to move the airplane on the ground can overload the rivets. Although a root cause could not be determined, due to the severity of separation of a horizontal stabilizer, EASA determined that the corrective actions should be required for other airplanes of the same type design.

Pilatus Aircraft Ltd. had previously considered the small size of the original “DO NOT PUSH” markings and the significant chance of the markings being over-sprayed during a respray. As a result, Pilatus Aircraft Ltd. issued a service bulletin to specify replacing the smaller markings with new, larger placards. The FAA requires installing these placards in this AD.

The MCAI can be found in the AD docket on the Internet at https://www.regulations.gov/document?D=FAA-2018-1058-0002.
Comments

The FAA gave the public the opportunity to participate in developing this AD. The following presents the comment received on the proposal and the FAA’s response to the comment.

Request to Add Omitted Section to Required Procedures

Pilatus Aircraft Ltd. requested that the FAA amend the required actions to include section H of the Accomplishment Instructions in Pilatus Aircraft Ltd. PC-6 Service Bulletin No. 55-004, dated July 2, 2018. The commenter notes that section H was omitted and should be added to the final rule.

The FAA agrees with the commenter and has changed paragraph (f)(1)(i) to include section H.

Conclusion

The FAA reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD with the change described previously. The FAA determined that this change is consistent with the intent that was proposed in the NPRM for correcting the unsafe condition and does not add any additional burden upon the public than was already proposed in the NPRM. The FAA also determined that this change will not increase the economic burden on any operator or increase the scope of the AD.

Related Service Information under 1 CFR part 51

Pilatus Aircraft Ltd. has issued PC-6 Service Bulletin No. 55-004, dated July 2, 2018. The service information contains procedures for inspecting the left-hand and right-hand horizontal stabilizer hinge bracket assemblies and, if any discrepancies are found, repairing or replacing any damaged rivets and screws. Pilatus Aircraft Ltd. has also issued PC-6 Service Bulletin No. 55-002, Revision No. 1, dated February 18, 2016. This service information contains procedures for inspecting and repairing the horizontal stabilizer attachment hardware and installing four “DO NOT PUSH” placards. 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 30 products of U.S. registry. The FAA also estimates that it will take about 9 work-hours per product to comply with the inspection and placard requirements of this AD. The average labor rate is $85 per work-hour. Required parts will cost about $200 per product.

Based on these figures, the FAA estimates the cost of the inspection and placard requirements on U.S. operators to be $28,950, or $965 per product.

In addition, the FAA estimates the following to do any necessary follow-on actions: Each rivet replacement will take 2 work-hours, fastener replacement will take 3 work-hours, one hinge bracket assembly replacement will take 9 work-hours, and two hinge bracket assembly replacements will take 15 work-hours. The total estimated cost of parts will be $10,000. The FAA has no way of determining the number of products that may need replacement.

**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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to small airplanes, gliders, balloons, airships, domestic business jet transport airplanes, and associated appliances to the Director of the Policy and Innovation Division.

**Regulatory Findings**

The FAA determined that 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) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

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

(4) 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):


(a) Effective Date

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

(b) Affected ADs

   None.

(c) Applicability


   Note 1 to paragraph (c): These airplanes may also be identified as Fairchild Republic Company airplanes, Fairchild Industries airplanes, Fairchild Heli Porter airplanes, or Fairchild-Hiller Corporation airplanes.
(d) Subject

Air Transport Association of America (ATA) Code 55: Stabilizers.

(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 sheared or missing rivets on the horizontal stabilizer hinge bracket assemblies. The FAA is issuing this AD to prevent failure of the primary horizontal stabilizer load path, which could lead to separation of the horizontal stabilizer and result in loss of control of the airplane.

(f) Actions and Compliance

Unless already done, do the following actions in paragraphs (f)(1) and (2).

(1) Within the next 100 hours time-in-service after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD) or within the next 12 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs first:

   (i) Inspect the left-hand and the right-hand horizontal stabilizer hinge bracket assemblies for cracks, loose screws and rivets, sheared rivets, missing rivets, and looseness of the electrical bonding strap, and inspect the top and bottom screws at each hinge bracket. Repair or replace any parts with discrepancies before further flight. You must do the actions required by this paragraph by following sections C through H of the Accomplishment Instructions-Part 1-On Aircraft in Pilatus Aircraft Ltd. PC-6 Service Bulletin No. 55-004, dated July 2, 2018.
(ii) Install four “DO NOT PUSH” placards, part number 110.71.06.847 or 110.71.06.848, on the horizontal stabilizer by following section G of the Accomplishment Instructions-Aircraft in Pilatus Aircraft Ltd. PC-6 Service Bulletin No. 55-002, Revision. No. 1, dated February 18, 2016.

(2) After [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do not install a horizontal stabilizer on any airplane unless it has been inspected as specified in paragraph (f)(1)(i) of this AD and found to be free of discrepancies or all discrepancies have been repaired or replaced.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Small Airplane Standards 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 ATTN: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Standards 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.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must instead be accomplished using a method approved by the Manager, Small Airplane Standards Branch, FAA, or the European Aviation Safety Agency (EASA).

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2018-0217, dated October 10, 2018, for related information.
(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) Pilatus Aircraft Ltd. PC-6 Service Bulletin No. 55-002, Revision No. 1, dated February 18, 2016.


(3) For Pilatus Aircraft Ltd service information identified in this AD, contact PILATUS Aircraft Ltd., Customer Technical Support (MCC), P.O. Box 992, CH-6371 Stans, Switzerland; phone: +41 (0)41 619 67 74; fax: +41 (0)41 619 67 73; email: techsupport@pilatus-aircraft.com; Internet: http://www.pilatus-aircraft.com.

(4) You may view this service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. In addition, you can access this service information on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-1058.

(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, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.
Issued in Kansas City, Missouri, on May 23, 2019.

Melvin J. Johnson  
Aircraft Certification Service  
Deputy Director, Policy and Innovation Division, AIR-601  