

Airworthiness Directive

AD No.: 2020-0278

Issued: 14 December 2020

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: Type/Model designation(s):

PILATUS AIRCRAFT LTD PC-6 aeroplanes

Effective Date: 28 December 2020

TCDS Number(s): Switzerland No. F 56-10

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2020-0120 dated 27 May 2020.

ATA 05 – Time Limits / Maintenance Checks – Airworthiness Limitations Section – Amendment

Manufacturer(s):

Pilatus Aircraft Ltd. and Fairchild Republic Company, formerly Fairchild Industries, Fairchild Heli Porter and Fairchild-Hiller Corporation

Applicability:

PC-6 aeroplanes, all manufacturer serial numbers (MSN).

Definitions:

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

The ALS: Pilatus PC-6 Aircraft Maintenance Manual (AMM) Document Number 01975, Chapter 04-00-00, or Document Number 01975 (IAC AR), Chapter 04-00-00, both issue 30, and Airworthiness Limitations Section (ALS) Document Number 02334, issue 10, as applicable to aeroplane model.

The AMP: The approved Aircraft Maintenance Programme (AMP), on the basis of which the operator or the owner ensures the continuing airworthiness of each operated aeroplane. For affected PC-6 aeroplanes operated under EU regulations, compliance with the approved AMP is required by Commission Regulation (EU) <u>1321/2014</u>, Part M.A.301, paragraph 3.



New and/or more restrictive tasks: This includes all tasks that are new and all tasks for which a threshold or interval was reduced, which were introduced into the ALS (as defined in this AD) since the previous ALS Revision that is currently incorporated in the AMP.

Reason:

The airworthiness limitations and certification maintenance instructions for Pilatus PC-6 aeroplanes, which are approved by EASA, are currently defined and published in the ALS. These instructions have been identified as mandatory for continued airworthiness.

Failure to accomplish these instructions could result in an unsafe condition.

Previously, EASA issued AD 2020-0120 to require implementation of the maintenance tasks and airworthiness limitations as specified in Pilatus PC-6 AMM Document Number 01975, or Document Number 01975 (IAC AR), both at issue 29, and ALS Document Number 02334 at issue 9, as applicable.

Since that AD was issued, an error has been discovered in the installation procedure given in data module 53-00-01 and Appendix K of the ALS. The analysis determined that there was a potential unsafe condition which could lead to loss of the control of the aeroplane due to fatigue failure due to undetected cracks in the wing to fuselage attachment Frame 3.

Consequently, Pilatus issued the ALS to introduce reference to the corrected data modules for the inspection of fuselage wing fittings (Document Number 01975 and Document Number 01975 (IAC AR) Chapter 53-00-01 or Document Number 02334 APPENDIX K). This revision of the AMM and separate ALS correct the data modules FUSELAGE WING FITTINGS - INSPECTION / CHECK to ensure the bush Part Number (P/N) 6100.0020.01 is installed with grease in accordance with the design.

For the reasons described above, this AD retains the requirements of EASA AD 2020-0120, which is superseded, and requires accomplishment of the actions specified in the ALS. For certain aeroplanes, this AD also requires an additional one-time Eddy Current (EC) inspection of the fuselage wing fittings and wing to fuselage fittings.

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

Required as indicated, unless accomplished previously:

One-Time Eddy Current Inspection:

(1) For aeroplanes on which the last inspection of the fuselage wing fittings and wing to fuselage fittings was performed using a fluorescent dye-penetrant method, or if no record exists that an EC inspection of these areas was previously accomplished, or if the last EC inspection was accomplished without removing the bushes (as required by the new data modules), or if no record exists that the bushes were removed during that inspection, during the next scheduled EC inspection (Check 2) of the left and right wing-strut fitting after the effective date of this AD, accomplish an EC inspection of the fuselage wing fittings and wing to fuselage fittings (left-hand and right-hand sides) in accordance with the instructions of the new data modules, as defined in the ALS.



(2) In accordance with the design, the bush P/N 6100.0020.01 must be installed with grease. If the bush P/N 6100.0020.01 has been bonded as instructed in the AMM Doc No. 01975 issue 29 (Ref. DM 53-00-01, Page Block 601), or ALS Document Number 02334 issue 9 (ref. Appendix K), within 50 flight hours after the effective date of this AD, inspect fuselage Frame 3, remove the bush P/N 6100.0020.01 and replace the removed bush with a new bush P/N 6100.0020.01, installing this with grease.

This can be accomplished in accordance with the instructions of new data modules, as defined in the ALS.

Maintenance Tasks and Replacement of Life Limited Parts:

- (3) From the effective date of this AD, accomplish the following actions, as specified in the ALS, as applicable to aeroplane model and depending on aeroplane configuration.
 - (3.1) Replace each component before exceeding the applicable life limit, and
 - (3.2) Within the thresholds and intervals, accomplish all applicable maintenance tasks.

Corrective Action(s):

(4) In case of finding discrepancies (as defined in the ALS) during accomplishment of any task as required by paragraph (1), (2) or (3) of this AD, within the compliance time specified in the ALS, accomplish the applicable corrective action(s) in accordance with applicable Pilatus maintenance documentation. If no compliance time is identified in the ALS, accomplish the applicable corrective action(s) before next flight. If a detected discrepancy is not identified in the ALS, before next flight, contact Pilatus for approved instructions and accomplish those instructions accordingly.

AMP Revision:

(5) Within 12 months after the effective date of this AD, revise the approved AMP by incorporating the limitations, tasks and associated thresholds and intervals described in the ALS, as applicable to aeroplane configuration.

Credit:

(6) If, before the effective date of this AD, the AMP has been revised to incorporate the maintenance tasks and life limitations as specified in a previous version of the ALS, that action ensures the continued accomplishment of those tasks and limitations.

Consequently, for an aeroplane to which that AMP applies, it is acceptable to accomplish the new and/or more restrictive tasks and limitations as specified in the ALS, as applicable to aeroplane model and depending on configuration, within the compliance times as specified in the ALS to comply with paragraph (3) of this AD.

For that AMP, it is acceptable to incorporate the new and/or more restrictive tasks and limitations as specified in the ALS, as applicable to aeroplane model and depending on aeroplane configuration, as specified in the ALS, into the AMP to comply with paragraph (5) of this AD.



Recording AD Compliance:

(7) When the AMP of an aeroplane has been revised as required by paragraph (5) or (6) of this AD, as applicable, that action ensures continued accomplishment of the tasks as required by paragraphs (3) and (4) of this AD for that aeroplane. Consequently, after revising the AMP, as required by paragraph (5) or (6) of this AD, as applicable, it is not necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.

Ref. Publications:

Pilatus PC-6 ALS Document Number 02334, issue 10 dated 30 October 2020.

Pilatus PC-6 AMM, Chapter 04-00-00, Document Number 01975, issue 30 dated 30 October 2020.

Pilatus PC-6 AMM, Chapter 04-00-00, Document Number 01975 (IAC AR), issue 30 dated 30 October 2020 (approved by EASA on behalf of the Interstate Aviation Committee for aeroplanes registered in the Commonwealth of Independent States).

The use of later approved revisions of the above-mentioned documents 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 26 November 2020 as PAD 20-188 for consultation until 10 December 2020. No comments were received during the consultation period.
- 3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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 <u>EU aviation safety reporting system</u>. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
- For any question concerning the technical content of the requirements in this AD, please contact: Pilatus Aircraft Ltd, Customer Support General Aviation, CH-6371 Stans, Switzerland, Telephone: +41 848 24 7 365, E-mail: techsupport.ch@pilatus-aircraft.com, Website: www.pilatus-aircraft.com.

