EASA AD No.: 2021-0110



# **Airworthiness Directive**

AD No.: 2021-0110

**Issued: 21 April 2021** 

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 open a paircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 13. 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 designations

PILATUS AIRCRAFT Ltd PC-12 aeroplates

Effective Date: 05 May 2021
TCDS Number(s): EASA.A.089

Foreign AD: Not applicable

Supersedure: None

ATA 32 – Landing Gear – Nose Landing Gear fork Assembly – Inspection / Replacement

#### Manufacturer(s):

Pilatus Aircraft Ltd

## **Applicability:**

PC-12, PC-12/45, PC-12/4 and PC-12, 47E aeroplanes, all manufacturer serial numbers.

### **Definitions:**

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

The B: Pilatus Aircr t PC-12 Service Bulletin (SB) 32-029.

Affected part: Nose landing gear (NLG) fork assembly Part Number (P/N) 532.20.12.112 and/or NLG strut assembly P/N 532.20.12.044, with installed cylinder pipes having P/N 532.20.12.145 and having a serial number (s/n) as listed in section 1.A of the SB.

**Serviceable part**: Any NLG fork assembly or NLG strut assembly with cylinder pipes having P/N 532.20.12.145, which is not an affected part; or an affected part that, prior to installation, has passed an inspection (no exposed unprotected raw material detected) in accordance with the instructions of the SB.



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#### Reason:

Occurrences were reported where corrosion was found on NLG strut assemblies installed on PC-12 aeroplanes. It was identified that the corrosion was due to a manufacturing non-conformity of the affected parts, which exposed unprotected raw material at the NLG fork interface.

This condition, if not detected and corrected, could lead to loss of the NLG damping, potential loss of the nose wheel fork and the nose wheel, with consequent loss of nose wheel directional control on ground, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, Pilatus issued the SB, providing inspection tructions to identify the affected parts and to detect corrosion.

For the reason described above, this AD requires a one-time inspection of the NLG diding tube at the NLG fork interface, and, depending on findings, replacement of the rected part. his about also provides the conditions for (re)installation of an affected part on an about a solution.

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

Required as indicated, unless accomplished previously:

## Inspection/Replacement:

(1) Within 10 months or 500 flight hours, whichever or surs first after the effective date of this AD, inspect the NLG sliding tube at the interface with the NLG for bassembly and, if corrosion or untreated material is found, replace the rected art, in cordance with the instructions of the SB.

## Part(s) Installation:

(2) From the effective date of this D, it is allowed to install on any aeroplane an affected part, provided it is a serviceable part as defined this AD.

#### **Ref. Publications:**

Pilatus Aircraft PC-12 St. 2-62 issue dated 08 February 2021.

The use of later pureved revisions of the above-mentioned document is acceptable for compliance with the requirements of the above-mentioned document is acceptable for compliance with the requirements.

#### Remz ks:

- 1. requested and ppropriately substantiated, EASA can approve Alternative Methods of empliance or this AD.
- 2. This Ab was posted on 23 March 2021 as PAD 21-045 for consultation until 20 April 2021. No comments were received during the consultation period.
- 3. Enquiries regarding this AD should be referred to the EASA Safety 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</u> reporting system. 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.

5. For any question concerning the technical content of the requirements in this AD, please contact: Pilatus Aircraft Ltd, Customer Support PC-12, CH-6371 Stans, Switzerland, Telephone: +41 41 619 33 33, Fax: +41 41 619 73 11

E-mail: SupportPC12@pilatus-aircraft.com, Website: www.pilatus-aircraft.com,

