



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 21-045

Issued: 23 March 2021

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

PILATUS AIRCRAFT Ltd

Type/Model designation(s):

PC-12 aeroplanes

Effective Date: [TBD - standard: 14 days after AD issue date]

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

Definitions:

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

The SB: Pilatus Aircraft 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.

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 instructions to identify the affected parts and to detect corrosion.

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

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

Required as indicated, unless accomplished previously:

Inspection/Replacement:

- (1) Within 10 months or 500 flight hours, whichever occurs first after the effective date of this AD, inspect the NLG sliding tube at the interface with the NLG fork assembly and, if corrosion or untreated material is found, replace the affected part, in accordance with the instructions of the SB.

Part(s) Installation:

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

Ref. Publications:

Pilatus Aircraft PC-12 SB 32-029 original issue dated 08 February 2021.

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

Remarks:

1. This Proposed AD will be closed for consultation on 20 April 2021.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation](#)



[safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this PAD 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.

4. For any question concerning the technical content of the requirements in this PAD, please contact: Pilatus Aircraft Ltd, Customer Support PC-12, CH-6371 Stans, Switzerland,
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E-mail: SupportPC12@pilatus-aircraft.com, Website: www.pilatus-aircraft.com.

