Airworthiness Directive

AD No.: 2023-0217

Issued: 19 December 2023

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:
FOKKER SERVICES B.V.

Type/Model designation(s):
F27 aeroplanes

Effective Date: 26 December 2023

TCDS Number(s): EASA.A.036

Foreign AD: Not applicable

Supersedure: None

ATA 32 – Landing Gear – Main Landing Gear Upper Member – Inspection

---

Manufacturer(s):
Fokker Aircraft B.V.

Applicability:
F27 Mark 050, Mark 0502 and Mark 0604 aeroplanes, all serial numbers.

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

The SB: Fokker Service Bulletin (SB) SBF50-32-041.

Affected part: Upper member of a main landing gear (MLG).

Serviceable part: An affected part which passed a detailed inspection (DET) for cracks detection and a special detailed inspection (SDI) (conductivity test) in accordance with the instructions of the SB.

Reason:
An occurrence was reported of finding a cracked MLG upper member installed on a Fokker F27 Mark 050 aeroplane. Investigation revealed low mechanic properties of that upper member. The root cause analysis is still ongoing and the presence of low mechanic properties cannot be excluded on other MLG upper member units.

This condition, if not detected and corrected, could lead to failure of the MLG, possibly resulting in damage to the aeroplane and injury to the occupants.

To address this potential unsafe condition, Fokker Services issued the SB, providing inspection and corrective action(s) instructions.

For the reason described above, this AD requires accomplishment of a DET, repetitive General Visual Inspections (GVI), an SDI (conductivity test), and, depending on findings, corrective action(s). This AD also regulates the (re)installation of an affected part.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) Within 1 month or 35 flight cycles (FC), whichever occurs first after the effective date of this AD, perform a DET of each affected part in accordance with the instructions of the SB, and, thereafter, at intervals not exceeding 1 day, perform a GVI of each affected part.

(2) Within 3 months or 100 FC, whichever occurs first after the effective date of this AD, perform a DET followed by a SDI (conductivity test) of each affected part in accordance with the instructions of the SB.

Corrective Action(s):

(3) If, during any DET or GVI as required by paragraph (1) or (2) of this AD, any crack is detected on an affected part, before next flight, replace that part with a serviceable part in accordance with the instructions of the SB.

(4) If, during any SDI (conductivity test) of an affected part, as required by paragraph (2) of this AD, any conductivity measurement is found not acceptable, as defined in the SB, before next flight, contact Fokker Services for corrective action instructions and, within the compliance time specified therein, accomplish those instructions accordingly.

Reporting:

(5) If, during any DET or GVI as required by paragraph (1) or (2) of this AD, any crack is detected on an affected part, within 15 days after the accomplishment of that DET, report the findings to Fokker Services. This can be done in accordance with the instructions of the SB.

(6) Within 15 days after the accomplishment of the SDI (conductivity test) as required by paragraph (2) of this AD, report the measurements to Fokker Services (including acceptable measurements, as defined in the SB). This can be accomplished in accordance with the instructions of the SB.

Terminating Action:

(7) Accomplishment of the DET followed by the SDI (conductivity test) on each affected part on an aeroplane, as required by paragraph (2) of this AD, or replacement of each affected part with a serviceable part, constitutes terminating action for the repetitive GVI as required by paragraph (1) of this AD for that aeroplane.

Part(s) Installation:

(8) From the effective date of the AD, it is allowed to install a MLG on an aeroplane, provided that the upper member of that MLG is a serviceable part.

(9) From the effective date of the AD, it is allowed to install an affected part on a MLG, provided it is a serviceable part.

Ref. Publications:

Fokker SBF50-32-041 original issue dated 12 December 2023.

The use of later approved revisions of the above-mentioned document 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.

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 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 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: Fokker Services B.V., Technical Services Dept., P.O. Box 1357, 2130 EL, Hoofddorp, The Netherlands, Telephone +31-88-6280-350, Fax +31-88-6280-111, E-mail: technicalservices@fokkerservices.com.
   The referenced publication can be downloaded from www.myfokkerfleet.com.