



Emergency Airworthiness Directive

AD No.: 2019-0237-E

Issued: 20 September 2019

Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 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:

DG-FLUGZEUGBAU GmbH

Type/Model designation:

DG-500 and DG-1000 sailplanes and powered sailplanes

Effective Date: 24 September 2019

TCDS Number(s): EASA.A.072, EASA.A.233

Foreign AD: Not applicable

Supersedure: None

ATA 44 – Cabin Systems – Canopy Lock / Rear Locking Rods – Inspection / Check / Repair

ATA – Aircraft Flight Manual – Amendment

Manufacturer(s):

DG-Flugzeugbau GmbH, formerly Glaser-Dirks Flugzeugbau GmbH, ELAN Flight Ltd, ELAN LINE D.O.O.

Applicability:

DG-500 ELAN Trainer, DG-500 ELAN ORION, DG-500/20 ELAN and DG-500/22 ELAN sailplanes, and DG-500 M and DG-500 MB powered sailplanes, all serial numbers (s/n); and

DG-1000S sailplanes and DG-1000T powered sailplanes, s/n up to 10-144 inclusive.

Definitions:

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

The TN: DG-Flugzeugbau GmbH Technical Note (TN) TN1000/42 and TN500/13, published as a single document (Doc.-No.: TM1000-42 FE-29-01).



The RI: DG-Flugzeugbau GmbH Repair Instruction (RI) RI-DG-05 for TN1000/42 and TN500/13 instruction 3.

Reason:

Occurrences have been reported where the rear locking rod of the rear canopy rotated out of the threads of the operating mechanism. Due to the similarity in design, the front canopy locking mechanism may also be affected.

This condition, if not detected and corrected, could lead to blocking of the canopy emergency release system, possibly preventing safe escape of the occupant(s) from the (powered) sailplane in case of an in-flight emergency.

To address this unsafe condition, DG-Flugzeugbau published the TN and the RI to provide inspection and repair instructions.

For the reason described above, this AD requires repetitive inspections of the front and rear canopy to determine if the end of the rear locking rod protrudes over the canopy frame contour, and annual checks of the front and rear canopy rear locking rods to determine that they are screwed in tightly, and, depending on findings, repair of the canopy rear locking rods. This AD also requires amendment of the applicable Aircraft Flight Manual (AFM).

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

Required as indicated, unless accomplished previously:

Inspection(s) / Check(s):

- (1) Before next flight after the effective date of this AD, and, thereafter, during each daily inspection, as specified in Chapter 4 of the applicable AFM, inspect the front and rear canopy in accordance with instruction 1 of the TN.
- (2) Before next flight after the effective date of this AD, and, thereafter, during each annual inspection, check the rear locking rods of both front and rear canopy in accordance with instruction 2 of the TN.

Repair:

- (3) If, during any daily inspection or annual check as required by paragraph (1) or (2) of this AD, as applicable, discrepancies are found as defined in the TN, before next flight, accomplish a repair of each affected rear locking rod in accordance with the instructions of the RI.

AFM Amendment:

- (4) Within 3 months after the effective date of this AD, amend the applicable AFM of the sailplane or powered sailplane by inserting the pages in accordance with instruction 4 the TN, inform all pilots and thereafter, operate the sailplane or powered sailplane accordingly.

Note 1: The inspections and checks as required by paragraphs (1) and (2) of this AD and the AFM amendment as required by paragraph (4) of this AD can be accomplished by the pilot-owner in accordance with the provisions of paragraph M.A.801 of Regulation (EU) No 1321/2014.



Ref. Publications:

DG-Flugzeugbau GmbH TN1000/42 and TN500/13 (single document), original issue dated 18 July 2019. (German version TM1000/42 and TM500/13 dated 17 July 2019).

DG-Flugzeugbau GmbH RI-DG-05 original issue dated 15 August 2019 (German version RA_DG-05 dated 15 August 2019).

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. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
3. Enquiries regarding this AD should be referred to the 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 [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: DG-Flugzeugbau GmbH, Otto-Lilienthal Weg 2, D-76646 Bruchsal, Germany, Te.: +49 (0)7251 302 0140, E-mail: dirks@dg-flugzeugbau.de.

