DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0600; Product Identifier 2019-CE-043-AD; Amendment 39-21154; AD 2020-13-09]

RIN 2120-AA64

Airworthiness Directives; DG Flugzeugbau GmbH Gliders

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all DG Flugzeugbau GmbH Models DG-500 Elan Orion, DG-500 Elan Trainer, DG-500/20 Elan, DG-500/22 Elan, DG-500M, and DG-500MB gliders and certain Models DG-1000S and DG-1000T gliders. This AD results from mandatory continuing airworthiness information (MCAI) issued by the aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as the rear locking rod of the rear canopy rotating out of the threads of the operating mechanism, which could lead to blocking of the canopy emergency release system, preventing safe escape of occupants from the glider. The FAA is issuing this AD to require actions to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
ADDRRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to https://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For the DG Flugzeugbau GmbH service information and Repair Instruction RI-DG-05 identified in this AD, contact DG-Flugzeugbau GmbH, Otto Lilienthal Weg 2, D-76646, Bruchsal, Germany, telephone: +49 (0) 7251 3020-0, fax: +49 (0) 7251 3020-200; email: dirks@dgflugzeugbau.de; internet: https://www.dg-flugzeugbau.de/en/. You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0600.

Examining the AD Docket

You may examine the AD docket on the internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0600; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Jim Rutherford, Aerospace Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4165; fax: (816) 329-4090; email: jim.rutherford@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD No. 2019-0237R1, dated September 24, 2019, (referred to after this as “the MCAI”), to correct an unsafe condition for DG Flugzeugbau GmbH Models DG-500 Elan Orion, DG-500 Elan Trainer, DG-500/20 Elan, DG-500/22 Elan, DG-500M and DG-500MB, and certain Models DG-1000S and DG-1000T gliders. The MCAI states:

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 [DG-Flugzeugbau GmbH Technical Note TN1000/42 and TN500/13] and the RI [Repair Instruction RI-DG-05] to provide inspection and repair instructions.

For the reason described above, this [EASA] 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 [EASA] AD also requires amendment of the applicable Aircraft Flight Manual (AFM).

This [EASA] AD is revised to remove the references to the TN instruction paragraphs, which have changed with TN issue 01.b. The revised TN issues were added to the list of reference publications.


**Related Service Information under 1 CFR part 51**

The FAA reviewed DG Flugzeugbau GmbH Technical Note No. 1000/42, Document No. TM1000-42 FE-29-01, Issue 01.b, dated September 11, 2019; and Technical Note TN500/13, Document No. TM1000-42 FE-29-01, Issue 01.b, dated September 11, 2019; which are co-published as one document. The service information contains procedures for inspecting the rear locking rods on both the front and rear canopy for rod protrusion.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

**Other Related Service Information**

The FAA also reviewed Repair Instruction RI-DG-05, dated August 15, 2019. The service information is referenced in DG Flugzeugbau GmbH Technical Note No. 1000/42, Document No. TM1000-42 FE-29-01, Issue 01.b, dated September 11, 2019; and Technical Note TN500/13, Document No. TM1000-42 FE-29-01, Issue 01.b, dated September 11, 2019; and contains procedures for repairing the rear locking rods of the canopy lock.

**FAA’s Determination and Requirements of the AD**

These products have been approved by the aviation authority of another country and are approved for operation in the United States. Pursuant to our bilateral agreement
with this State of Design Authority, it has notified us of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this AD because it evaluated all information provided by the State of Design Authority and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

**Differences Between this AD and the MCAI**

The MCAI requires a daily inspection of the front and rear canopy, and this AD does not.

**FAA’s Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because the FAA has determined that the required corrective actions must be accomplished before further flight. Therefore, the FAA finds good cause that notice and opportunity for prior public comment are impracticable. In addition, for the reason stated above, it finds that good cause exists for making this amendment effective in less than 30 days.

**Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and the FAA did not precede it by notice and opportunity for public comment. The FAA invites you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-0600; Product Identifier 2019-CE-043-AD” at the beginning of your comments. The FAA will consider all comments received by the closing date and may amend this AD because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to https://www.regulations.gov, including any
personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this AD.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Jim Rutherford, Aerospace Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, Missouri 64106. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Costs of Compliance

The FAA estimates that this AD will affect 47 products of U.S. registry. The FAA also estimates that it would take 1.5 work-hours per product to inspect the canopy rear locking rods. In addition, the FAA estimates that it would take 0.5 work-hour per product to revise the aircraft flight manual. The average labor rate is $85 per work-hour.

Based on these figures, the FAA estimates the annual cost of this AD on U.S. operators to be $7,990, or $170 per product.

In addition, the FAA estimates that any necessary follow-on repairs to the canopy rear locking rods will take 8 work-hours and require parts costing $200, for a cost of $880 per product. The FAA has no way of determining the number of products that may need these actions.
Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

Regulatory Findings

The FAA determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.
For the reasons discussed above, I certify that this AD:

(1) Is not a “significant regulatory action” under Executive Order 12866, and

(2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2020-13-09 **DG Flugzeugbau GmbH:** Amendment 39-21154; Docket No. FAA-2020-0600; Product Identifier 2019-CE-043-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to DG Flugzeugbau GmbH Models DG-500 Elan Orion, DG-500 Elan Trainer, DG-500/20 Elan, DG-500/22 Elan, DG-500M, and DG-500MB gliders, all serial numbers; and DG-1000S and DG-1000T gliders, serial numbers up to and including 10-144; certificated in any category.

(d) Subject

(e) Reason

This AD was prompted by the rear locking rod of the rear canopy rotating out of the threads of the operating mechanism. Due to the similarity in design, the front canopy locking mechanism may also be affected. The FAA is issuing this AD to repetitively inspect the front and rear canopy locking rods, and make repairs as necessary, to prevent blocking of the canopy emergency release system, which could affect the evacuation of occupants from the glider in an emergency.

(f) Actions and Compliance

Unless already done, do the following actions:

(1) Before further flight after [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), revise the flight manual for your glider by inserting the flight manual pages listed in Instruction 5 of DG Flugzeugbau GmbH Technical Note (TN) No. 1000/42, Document No. TM1000-42 FE-29-01, Issue 01.b, dated September 11, 2019, and TN No. 500/13, Document No. TM1000-42 FE-29-01, Issue 01.b, dated September 11, 2019, which are co-published as one document (TM1000-42 FE-29-01). This action may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR 43.9 (a)(1) through (4) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(2) Before further flight after [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), and thereafter at each annual inspection, inspect the rear locking rods of the front and rear canopy and repair any discrepancies by following Instructions 1 through 3 in TM1000-42 FE-29-01.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Small Airplane Standards Branch, FAA, has the authority to
approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Jim Rutherford, Aerospace Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4165; fax: (816) 329-4090; email: jim.rutherford@faa.gov. Before using any approved AMOC on any glider to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(h) Related Information


(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.


Note 1 to paragraph (i)(2) of this AD: DG Flugzeugbau GmbH Technical Note No. 1000/42 Document No. TM1000-42 FE-29-01, Issue 01.b, dated September 11, 2019; and DG Flugzeugbau GmbH Technical Note No. TN500/13, Document No. TM1000-42 FE-29-01, Issue 01.b, dated September 11, 2019, are co-published as one document.
(3) For the DG Flugzeugbau GmbH service information and Repair Instruction RI-DG-05 identified in this AD, contact DG-Flugzeugbau GmbH, Otto Lilienthal Weg 2, D-76646, Bruchsal, Germany, telephone: +49 (0) 7251 3020-0, fax: +49 (0) 7251 3020-200; email: dirks@dgflugzeugbau.de; internet: https://www.dg-flugzeugbau.de/en/.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0600.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on June 19, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2020-17043 Filed: 8/5/2020 8:45 am; Publication Date: 8/6/2020]