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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2007-28709; Directorate Identifier 2007-CE-062-AD; Amendment 39-15219; AD 2007-21-01]**

**RIN 2120-AA64**

**Airworthiness Directives; DG Flugzeugbau GmbH Model DG-500 Elan Series, DG-500M, and DG-500MB Gliders**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

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**SUMMARY:** We are adopting a new airworthiness directive (AD) for the products listed above. 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:

During a recent flight with a DG-500 ELAN Trainer, the bolt of bearing stand 5RU61, which is the pivot for bell crank 5St19, failed in-flight, leading to loss of control of the aircraft. Although the occupants managed to exit the aircraft safely, the aircraft crashed and was damaged beyond repair. While the investigation continues, the most likely cause is suspected to be insufficient tightening of the nut on the bolt of bearing stand 5RU61.

This condition, if not corrected, may cause excessive bending loads, leading to premature failure of the bolt and loss of control of the aircraft.

This AD requires actions that are intended to address the unsafe condition described in the MCAI.

**DATES:** This AD becomes effective October 25, 2007.

On October 25, 2007, the Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD.

We must receive comments on this AD by November 5, 2007.

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- 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.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility 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 the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Greg Davison, Glider Program Manager, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4130; fax: (816) 329-4090.

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No. 2007-0176-E, dated June 22, 2007 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

During a recent flight with a DG-500 ELAN Trainer, the bolt of bearing stand 5RU61, which is the pivot for bell crank 5St19, failed in-flight, leading to loss of control of the aircraft. Although the occupants managed to exit the aircraft safely, the aircraft crashed and was damaged beyond repair. While the investigation continues, the most likely cause is suspected to be insufficient tightening of the nut on the bolt of bearing stand 5RU61.

This condition, if not corrected, may cause excessive bending loads, leading to premature failure of the bolt and loss of control of the aircraft. As a precautionary measure, for the reasons described above, this Emergency Airworthiness Directive (EAD) requires a check of the torque on the affected nut, immediate replacement of any bolts where the torque is found to be insufficient and introduces a life limit for the affected bolts. Any bolts that have already exceeded this limit in service must be replaced, as indicated.

You may obtain further information by examining the MCAI in the AD docket.

#### **Relevant Service Information**

DG Flugzeugbau GmbH has issued Technical Note 348/19 and 843/26 (same document), dated June 20, 2007, which references Working Instructions DG Flugzeugbau GmbH No. 1 and 2, dated June 20, 2007; and Working Instruction DG Flugzeugbau GmbH No. 3, dated June 25, 2007. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

## **FAA's Determination and Requirements of the AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we 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 or Service Information**

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might have also required different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are described in a separate paragraph of the AD. These requirements take precedence over those copied from the MCAI.

## **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 during a recent flight with a DG-500 ELAN Trainer, the bolt of bearing stand 5RU61, which is the pivot for bell crank 5St19, failed in flight with consequent loss of control of the aircraft. The most likely cause is insufficient tightening of the nut on the bolt of bearing stand 5RU61. This condition, if not corrected, may cause excessive bending loads that could result in premature failure of the bolt with consequent loss of control of the aircraft. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

## **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite 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-2007-28709; Directorate Identifier 2007-CE-062-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

## **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.

We are 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 Findings**

We 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;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **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 AD:



**2007-21-01 DG Flugzeugbau GMBH:** Amendment 39-15219; Docket No. FAA-2007-28709; Directorate Identifier 2007-CE-062-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective October 25, 2007.

**Affected ADs**

- (b) None.

**Applicability**

- (c) This AD applies to Models DG-500 Elan Series, DG-500M, and DG-500MB gliders, all serial numbers, certificated in any category.

**Subject**

- (d) Air Transport Association of America (ATA) Code 27: Flight Controls.

**Reason**

- (e) The mandatory continuing airworthiness information (MCAI) states:

During a recent flight with a DG-500 ELAN Trainer, the bolt of bearing stand 5RU61, which is the pivot for bell crank 5St19, failed in-flight, leading to loss of control of the aircraft. Although the occupants managed to exit the aircraft safely, the aircraft crashed and was damaged beyond repair. While the investigation continues, the most likely cause is suspected to be insufficient tightening of the nut on the bolt of bearing stand 5RU61.

This condition, if not corrected, may cause excessive bending loads, leading to premature failure of the bolt and loss of control of the aircraft.

As a precautionary measure, for the reasons described above, this Emergency Airworthiness Directive (EAD) requires a check of the torque on the affected nut, immediate replacement of any bolts where the torque is found to be insufficient and introduces a life limit for the affected bolts. Any bolts that have already exceeded this limit in service must be replaced, as indicated.

**Actions and Compliance**

- (f) Unless already done, do the following actions.

(1) Before the next flight after October 25, 2007 (the effective date of this AD) and thereafter at intervals not to exceed 12 months, inspect the actual torque of the nut that attaches bell crank 5St19 to the bolt following Working Instruction No. 1, dated June 20, 2007, as referenced in DG Flugzeugbau GmbH Technical Note 348/19 and 843/26 (same document), dated June 20, 2007, as applicable to type.

(i) If the torque is found to be less than 2.2 ft. lb. (3 Nm), before further flight, replace the affected bolt with a serviceable bolt following Working Instruction No. 2, dated June 20, 2007, as referenced in DG Flugzeugbau GmbH Technical Note 348/19 and 843/26 (same document), dated June 20, 2007, as applicable to type.

(ii) Report any findings of insufficient torque you find within 7 days after insufficient torque is found. Include in your report the glider serial number, glider hours time-in-service (TIS), the torque that was found, and a point of contact name and phone number. Send your report to DG Flugzeugbau GmbH, Otto-Lilienthal-Weg 2, D-76646 Bruchsal, Germany; telephone: +49 7251 3020140; facsimile: +49 7251 3020149; e-mail: dirks@dg-flugzeugbau.de.

(iii) If the torque is found to be 2.2 ft. lb. (3 Nm) or more, before further flight, increase the torque of the nut to 9 ft. lb. (12 Nm);

(2) Unless already replaced as required by paragraph (f)(1)(i) of this AD, within the next 6 months after October 25, 2007 (the effective date of this AD) or when the glider reaches a total of 1,000 hours TIS, whichever occurs later, and repetitively thereafter at intervals not to exceed 1,000 hours TIS, replace the affected bolt with a serviceable bolt following Working Instruction No. 2, dated June 20, 2007, as referenced in DG Flugzeugbau GmbH Technical Note 348/19 and 843/26 (same document), dated June 20, 2007, as applicable to type.

(3) Installation of an additional bracket following Working Instruction No. 3, dated June 25, 2007, as referenced in DG Flugzeugbau GmbH Technical Note 348/19 and 843/26 (same document), dated June 20, 2007, as applicable to type, terminates the repetitive requirement in paragraph (f)(2) of this AD.

## **FAA AD Differences**

Note: This AD differs from the MCAI and/or service information as follows: No differences.

## **Other FAA AD Provisions**

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, 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: Greg Davison, Glider Program Manager, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4130; fax: (816) 329-4090. Before using any approved AMOC on any airplane 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.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et. seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

## **Related Information**

(h) Refer to MCAI EASA AD No. 2007-0176-E, dated June 22, 2007, and DG Flugzeugbau GmbH Technical Note 348/19 and 843/26 (same document), dated June 20, 2007; Working Instructions No. 1 and No. 2, dated June 20, 2007, as referenced in DG Flugzeugbau GmbH Technical Note 348/19 and 843/26 (same document), dated June 20, 2007; and Working Instruction No. 3, dated June 25, 2007, as referenced in DG Flugzeugbau GmbH Technical Note 348/19 and 843/26 (same document), dated June 20, 2007, for related information.

## **Material Incorporated by Reference**

(i) You must use DG Flugzeugbau GmbH Technical Note 348/19 and 843/26 (same document), dated June 20, 2007; Working Instructions No. 1 and 2 dated June 20, 2007, and Working Instruction No. 3 dated June 25, 2007, as referenced in DG Flugzeugbau GmbH Technical Note 348/19 and 843/26 (same document), dated June 20, 2007, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact AMS-Flight d.o.o., Kavciceva 4, 1000 Ljubljana, Slovenia.

(3) You may review copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Kansas City, Missouri on September 28, 2007.

James E. Jackson,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7-19682 Filed 10-4-07; 8:45 am]