



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2017-0051; Directorate Identifier 2016-CE-043-AD; Amendment 39-18858; AD 2017-08-09]**

**RIN 2120-AA64**

**Airworthiness Directives; DG Flugzeugbau GmbH**

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

**ACTION:** Final Rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for DG Flugzeugbau GmbH Model DG-500MB gliders that are equipped with a Solo 2625 02 engine modified with a fuel injection system following the instructions of Solo Kleinmotoren GmbH Technische Mitteilung (TM)/Service Bulletin (SB) 4600-3 “Fuel Injection System” and identified as Solo 2625 02i. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as possible in-flight engine shut-down and engine fire due to failure of the connecting stud for the two fuel injector mounts of the engine redundancy system. We are issuing this AD to require actions to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0051; or in person at Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

For service information identified in this AD, contact Solo Kleinmotoren GmbH, Postfach 600152, 71050 Sindelfingen, Germany; telephone: +49 703 1301-0; fax: +49 703 1301-136; email: [aircraft@solo-germany.com](mailto:aircraft@solo-germany.com); Internet: <http://aircraft.solo-online.com>. You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

**FOR FURTHER INFORMATION CONTACT:** Jim Rutherford, Aerospace Engineer, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4165; fax: (816) 329-4090; email: [jim.rutherford@faa.gov](mailto:jim.rutherford@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to DG Flugzeugbau GmbH Model DG-500MB gliders. The NPRM was published in the *Federal Register* on February 7, 2017 (82 FR 9535). The NPRM proposed to correct an unsafe condition for the specified products and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country. The MCAI states:

An occurrence was reported involving a failure of the connecting stud for the two fuel injector mounts of the engine redundancy system.

This condition, if not corrected, could lead to an uncommanded in-flight engine shut-down and engine fire, possibly resulting in loss of control of the aeroplane.

To address this unsafe condition, Solo Kleinmotoren GmbH issued SB/TM 4600-5 to provide instructions for reinforcement and securing of the injector mounts.

For the reason described above, this AD requires modification of the engine redundancy system.

Solo Kleinmotoren GmbH SB/TM 4600-3 (currently at issue 2, dated 03 December 2012) will be revised to incorporate the modification required by SB/TM 4600-5 for future Solo 2625 02i engines.

The MCAI can be found in the AD docket on the Internet at:

<https://www.regulations.gov/document?D=FAA-2017-0051-0002>.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

### **Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

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

We reviewed Solo Kleinmotoren GmbH Technische Mitteilung (English translation: Service Bulletin), Nr. 4600-5, Ausgabe 2 (English translation: Issue 2), dated December 12, 2014. The service information describes procedures for changing the fuel injector mounts of the engine redundancy system and securing the connection of the lower to the upper mount. 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 of the AD.

## **Costs of Compliance**

We estimate that this AD will affect 3 products of U.S. registry. We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$67 per product.

Based on these figures, we estimate the cost of this AD on U.S. operators to be \$456, or \$152 per product.

## **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 this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) 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.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0051; 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 the NPRM, 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.

## **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:

2017-08-09 **DG Flugzeugbau GmbH**: Amendment 39-18858; Docket No.

FAA-2017-0051; Directorate Identifier 2016-CE-043-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to DG Flugzeugbau GmbH DG-500MB gliders, all serial numbers, that are:

(1) equipped with a Solo 2625 02 engine modified with a fuel injection system following the instructions of Solo Kleinmotoren GmbH Service Bulletin (SB)/Technische Mitteilung (TM) 4600-3 “Fuel Injection System” and identified as Solo 2625 02i; and

(2) certificated in any category.

#### **(d) Subject**

Air Transport Association of America (ATA) Code 72: Engine.

**(e) Reason**

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as failure of the connecting stud for the two fuel injector mounts of the engine redundancy system on gliders equipped with a Solo 2625 02i engine. We are issuing this AD to prevent such failure that could lead to the potential of an in-flight shut-down and engine fire and result in loss of control.

**(f) Actions and Compliance**

Unless already done, within the next 60 days after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), modify the engine redundancy system following the actions in Solo Kleinmotoren GmbH Technische Mitteilung (English translation: Service Bulletin), Nr. 4600-5, Ausgabe 2 (English translation: Issue 2), dated December 12, 2014.

Note 1 to paragraph (f) of this AD: This service information contains German to English translation. The EASA used the English translation in referencing the document. For enforceability purposes, we will refer to the Solo Kleinmotoren service information as it appears on the document.

**(g) Credit for Actions Accomplished in Accordance with Previous Service Information**

This AD allows credit for modification of the engine redundancy system as required in paragraph (f) of this AD if done before the effective date of this AD following Solo Kleinmotoren GmbH Technische Mitteilung (English translation: Service Bulletin), Nr. 4600-5, Ausgabe 1 (English translation: Issue 1), dated November 24, 2014.

**(h) Other FAA AD Provisions**

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: Jim Rutherford, Aerospace Engineer, 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 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.

**(i) Related Information**

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2014-0269, dated December 11, 2014 for related information. The MCAI can be found in the AD docket on the Internet at: <https://www.regulations.gov/document?D=FAA-2017-0051-0002>.

**(j) 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.

(i) Solo Kleinmotoren GmbH Technische Mitteilung (English translation: Service Bulletin), Nr. 4600-5, Ausgabe 2 (English translation: Issue 2), dated December 12, 2014.

(ii) Reserved.

(3) For Solo Kleinmotoren GmbH service information identified in this AD, contact Solo Kleinmotoren GmbH, Postfach 600152, 71050 Sindelfingen, Germany; telephone: +49 703 1301-0; fax: +49 703 1301-136; email: [aircraft@solo-germany.com](mailto:aircraft@solo-germany.com); Internet: <http://aircraft.solo-online.com>.

(4) You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. In addition, you can access this service information on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0051.

(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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Kansas City, Missouri, on April 11, 2017.

Brian A. Yanez,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.

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