



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0158; Directorate Identifier 2016-CE-040-AD]

RIN 2120-AA64

Airworthiness Directives; DG Flugzeugbau GmbH Gliders

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for DG Flugzeugbau GmbH Model DG-500MB gliders that are equipped with a Solo 2625 02 engine that has been 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 re-identified as Solo 2625 02i. This proposed AD results from 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 rod bearing resulting from too much load on the rod bearings from the engine control unit. We are issuing this proposed AD to require actions to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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.

For service information identified in this proposed 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; 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.

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-2017-0158; 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 proposed 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: 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.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2017-0158; Directorate Identifier 2016-CE-040-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

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

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD No.: 2016-0254, dated December 15, 2016, correction dated January 4, 2017 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Several occurrences have been reported of connecting rod bearing failure.

This condition, if not corrected, could lead to an uncommanded in-flight engine shut-down, possibly resulting in damage to the powered sailplane.

To address this unsafe condition, Solo Kleinmotoren developed a software update for the engine control unit (ECU) to reduce the load on the rod bearings, and issued SB/TM 4600-6, providing instructions to upload the modified software into the ECU.

For the reason described above, this AD requires a modification, updating the ECU software.

You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0158.

Related Service Information under 1 CFR part 51

Solo Kleinmotoren GmbH has issued Technische Mitteilung (English translation: Service Bulletin), Nr. 4600-6, Ausgabe 1 (English translation: issue 1), dated November 16, 2016. This service information contains a software update that provides new settings to the engine control unit (ECU) to lower the load on the bearings of the crankshaft and 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 this NPRM.

FAA's Determination and Requirements of the Proposed 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 proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

We estimate that this proposed AD will affect 3 products of U.S. registry. We also estimate that it would take about 2 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$510, or \$170 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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed regulation:

- (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.

List of Subjects in 14 CFR Part 39

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

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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:

DG Flugzeugbau GmbH: Docket No. FAA-2017-0158; Directorate Identifier 2016-CE-040-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 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 that has been 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 re-identified as Solo 2625 02i, and with a serial number (S/N) up to 369/207, except S/N’s 354/194, 356/196, 357/197, 358/198, 361/201, 362/202, 363/203, 364/204, and 368/206; that are

(2) certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 73: Engine Fuel & Control.

(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 rod bearing resulting from too much load on the rod bearings from the engine control unit. We are issuing this proposed AD to prevent such failure that could lead to an uncommanded in-flight engine shut-down, which could result in damage to the glider..

(f) Actions and Compliance

Unless already done, do the following actions in paragraphs (f)(1) and (2) of this AD:

(1) Within the next 60 days after the effective date of this AD, modify the engine by installing a software update for the engine control unit (ECU) following the actions in Solo Kleinmotoren GmbH Technische Mitteilung (English translation: Service Bulletin), Nr. 4600-6, Ausgabe 1 (English translation: issue 1), dated November 16, 2016.

(2) After the modification of an engine as required by paragraph (f)(1) of this AD, do not install a replacement ECU on that engine and do not upload any software update to the ECU of that engine unless the ECU software version is as specified in Solo Kleinmotoren GmbH Technische Mitteilung (English translation: Service Bulletin), Nr. 4600-6, Ausgabe 1 (English translation: issue 1), dated November 16, 2016.

Note 1 to paragraph (f)(1) and (2) 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) 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.

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2016-0254, dated December 15, 2016, correction dated January 4, 2017, for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0158. For service information related to 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; 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.

Issued in Kansas City, Missouri on February 17, 2017.

Pat Mullen,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.

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