DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-1130; Directorate Identifier 2015-CE-008-AD; Amendment 39-18150; AD 2015-09-04]

RIN 2120-AA64

Airworthiness Directives; DG Flugzeugbau GmbH Gliders

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments

SUMMARY: We are adopting a new airworthiness directive (AD) for DG Flugzeugbau GmbH Model DG-1000T gliders equipped with a Solo Kleinmotoren Model 2350 C engine that supersedes AD 2013-22-14 R1. 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 engine shaft failure with consequent propeller detachment. We are issuing this AD to require actions to address the unsafe condition on these products.

DATES: This AD is effective May 26, 2015.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of May 26, 2015.

We must receive comments on this AD by June 19, 2015.

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

- 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 service information identified in this AD, contact Solo Kleinmotoren GmbH, Postfach 600152, 71050 Sindelfingen, Germany; telephone: +49 7031 301-0; fax: +49 7031 301-136; email:
Examiner 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-2015-1130 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: Jim Rutherford, Aerospace Engineer, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4165; fax: 98160 329-4090; email: jim.rutherford@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On September 5, 2014, we issued AD 2013-22-14 R1, Amendment 39-17968 (79 FR 54895; September 15, 2014). That AD required actions intended to address an unsafe condition on DG Flugzeugbau GmbH Model DG-1000T gliders equipped with a Solo Kleinmotoren Model 2350 C engine and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country.

Since we issued AD 2013-22-14 R1, another occurrence of engine shaft failure and propeller detachment was reported on a Solo Kleinmotoren Model 2350 C engine that had been modified following Solo Kleinmotoren Service Bulletin 4603-14, dated April 28, 2014.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD No.: 2015-0052-E, dated March 27, 2015 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

An occurrence of engine shaft failure and consequent propeller detachment was reported on a Solo 2350 C engine.

This condition, if not corrected, could lead to additional cases of release of the propeller from the engine, possible resulting in damage to the sailplane, or injury to persons on the ground.

To address this unsafe condition, EASA issued Emergency AD 2013-0217-E to prohibit operation of the engine.

After that AD was issued, Solo Kleinmotoren GmbH developed instructions to install a modified excenter axle-pulley assembly, allowing to resume operation of the engine. This optional modification was introduced through EASA AD 2013-0217R1.
Since that AD was issued, another occurrence of engine shaft failure and propeller detachment was reported on a Solo 2350 C engine which had been modified in accordance with Solo Kleinmotoren Service Bulletin (SB) 4603-14.

For reasons described above, this AD supersedes EASA AD 2013-0217R1 and, pending the availability of EASA approved modification instructions, prohibits operation of all Solo 2350 C engines, including those engines which have been modified in accordance with Solo Kleinmotoren SB 4603-14. This AD also requires a one-time inspection of the propeller shaft to detect cracks and the reporting of findings.

This AD is considered to be temporary measure and further AD action will follow.


**Relative Service Information Under 1 CFR Part 51**

We reviewed Solo Kleinmotoren GmbH Anleitung zur Inspektion (English translation: Inspection Instruction), Nr. 4603-1, Ausgabe (English translation: dated) March 26, 2015. The service information describes procedures for inspecting the propeller shaft for cracking and reporting the results to the manufacturer. This information is reasonably available at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-1130 or see ADDRESSES for other ways to access this service information.

**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.

**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 failure of the engine shaft with consequent propeller detachment could result in damage to the glider or injury to persons on the ground. 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-2015-1130; Directorate Identifier 2015-CE-008-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.

Costs of Compliance

We estimate that this AD will affect 2 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 AD. The average labor rate is $85 per work-hour.

Based on these figures, we estimate the cost of the AD on U.S. operators to be $340, or $170 per product.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB control number. The control number for the collection of information required by this AD is 2120-0056. The paperwork cost associated with this AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting associated with this AD is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at 800 Independence Ave. SW., Washington, DC 20591. ATTN: Information Collection Clearance Officer, AES-200.

Authority for This Rulemaking


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 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.

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 removing Amendment 39-17968 (79 FR 54895; September 5, 2014), and adding the following new AD:

(a) Effective Date

This airworthiness directive (AD) becomes effective May 26, 2015.

(b) Affected ADs

This AD supersedes AD 2013-22-14 R1; Amendment 39-17968 (79 FR 54895; September 5, 2014).

(c) Applicability

This AD applies to DG Flugzeugbau GmbH Model DG-1000T gliders, all serial numbers, that are:

1. Equipped with a Solo Kleinmotoren Model 2350 C engine; 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) 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 engine shaft failure with consequent propeller detachment. We are issuing this AD to prevent failure of the engine shaft with consequent propeller detachment that could result in damage to the glider or injury of persons on the ground.

(f) Actions and Compliance

Unless already done, do the following actions:

1. As of November 25, 2013 (the effective date retained from AD 2013-22-14), do not operate the engine unless the engine is modified following instructions that are FAA-approved specifically for this AD. Contact the FAA office identified in paragraph (g)(1) of this AD to get more information about obtaining such instructions.

2. Modification of an engine following the instructions in Solo Kleinmotoren Service Bulletin 4603-14, dated April 28, 2014, is not an acceptable modification to comply with paragraph (f)(1) of this AD.

3. As of May 26, 2015 (the effective date of this AD), place a copy of this AD into the Limitations section of the aircraft flight manual (AFM).

4. Within the next 30 days after May 26, 2015 (the effective date of this AD), do a one-time inspection (magnetic particle or dye penetrant) of the propeller shaft following Solo Kleinmotoren
Note 1 to paragraph (f)(4) 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.

5) Within the next 30 days after May 26, 2015 (the effective date of this AD), report the results of the inspection required in paragraph (f)(4) of this AD to Solo Kleinmotoren GmbH. Include the serial number of the engine and the operational time since change of the axle in your report. You may find contact information for Solo Kleinmotoren GmbH in paragraph (i)(3) of this AD.

(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: 98160 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.

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.

(h) Related Information

Refer to MCAI found in European Aviation Safety Agency (EASA) AD No.: 2015-0052-E, dated March 27, 2015, for related information. You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-1130.

(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 2 to paragraph (i)(2)(i) 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.

(ii) Reserved.
(3) For service information identified in this AD, contact Solo Kleinmotoren GmbH, Postfach 600152, 71050 Sindelfingen, Germany; telephone: +49 7031 301-0; fax: +49 7031 301-136; email: aircraft@solo-germany.com; Internet: http://aircraft.solo-online.com/com.

(4) You may review copies of the 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. It is also available on the Internet at http://www.regulations.gov by searching for locating Docket No. FAA-2015-1130.

(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 22, 2015.
Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.