

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2018-0093; Product Identifier 2017-CE-047-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 supersede Airworthiness Directive (AD) 2017-11-03 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 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. This proposed AD adds DG Flugzeugbau GmbH Model DG-1000M gliders equipped with Solo 2625 02i engines to the applicability. 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 March 29, 2018.

**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](mailto:aircraft@solo-germany.com); internet: <http://aircraft.solo-online.com>. You may review copies of the referenced service information at the FAA, Policy and Innovation Division, 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-2018-0093; 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (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, FAA, Small Airplane Standards Branch, 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:****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-2018-0093; Product Identifier 2017-CE-047-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://www.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**

We issued AD 2017-11-03, Amendment 39-18902 (82 FR 24015; May 25, 2017) ("AD 2017-11-03"). That AD required actions intended to address an unsafe condition on DG Flugzeugbau GmbH Model DG-500MB gliders and was based on mandatory continuing

airworthiness information (MCAI) originated by the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community. That MCAI is EASA AD No.: 2016-0254, dated December 15, 2016, correction dated January 4, 2017 (referred to after this as "the MCAI").

Since we issued AD 2017-11-03, the FAA has now type certificated the DG Flugzeugbau GmbH Model DG-1000M glider and that glider model is equipped with a Solo 2625 02i engine. Since this model has the same engine, it is subject to the same unsafe condition in AD 2017-11-03.

You may examine the MCAI on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0093.

**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, approved for incorporation by reference on June 29, 2017 (82 FR 24015; May 25, 2017). The service information describes procedures for a software update that provides new settings to the engine control unit (ECU) to lower the load on the bearings of the crankshaft. 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 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 6 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 \$1,020, 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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to small airplanes, gliders, balloons, airships, domestic business jet transport airplanes, and associated appliances to the Director of the Policy and Innovation Division.

#### 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 removing Amendment 39-18902 (82 FR 24015; May 25, 2017), and adding the following new AD:

**DG Flugzeugbau GmbH:** Docket No. FAA-2018-0093; Product Identifier 2017-CE-047-AD.

#### (a) Comments Due Date

We must receive comments by March 29, 2018.

#### (b) Affected ADs

This AD replaces AD 2017-11-03, Amendment 39-18902 (82 FR 24015; May 25, 2017) ("AD 2017-11-03").

#### (c) Applicability

This AD applies to DG Flugzeugbau GmbH DG-500MB and DG-1000M gliders, all serial numbers, certificated in any category, that are equipped with Solo 2625 02 engines 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, or equipped with a Solo 2625 02i engine at manufacture, and have engine serial numbers (S/N) through 369/207, except engine S/N's 354/194, 356/196, 357/197, 358/198, 361/201, 362/202, 363/203, 364/204, and 368/206.

#### (d) Subject

Air Transport Association of America (ATA) Code 73: Engine fuel and control.

#### (e) Reason

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. AD 2017-11-03 resulted from failure of the connecting rod bearing because of too much load on the rod bearings from the engine control unit. This AD results from the need to add an airplane model to the applicability. 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 and to include FAA type certificated DG Flugzeugbau GmbH Model DG-1000M gliders with Solo 2625 02i engines.

#### (f) Actions and Compliance

(1) *For DG Flugzeugbau GmbH Model DG-500MB gliders:* Unless already done, within the next 60 days after June 29, 2017 (the effective date of AD 2017-11-03), 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) *For DG Flugzeugbau GmbH Model DG-1000M gliders:* Unless already done, 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.

(3) *For all gliders:* After the modification of an engine as required by paragraph (f)(1) or (f)(2) 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.

(4) *For all gliders:* The Note in Solo Kleinmotoren GmbH Technische Mitteilung (English translation: Service Bulletin), Nr. 4600-6, Ausgabe 1 (English translation: Issue 1), dated November 16, 2016, stating "the actions have to be accomplished by a certified maintenance organization and must be released to service accordingly" is not applicable to this AD.

*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) 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, FAA, Small Airplane Standards Branch, 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). 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) *Contacting the Manufacturer:* For any requirement in this AD to obtain corrective actions from a manufacturer, the action must

be accomplished using a method approved by the Manager, Small Airplane Standards Branch, FAA; or the European Aviation Safety Agency (EASA).

#### (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-2018-0093. 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](mailto:aircraft@solo-germany.com); internet: <http://aircraft.solo-online.com>. You may review copies of the referenced service information at the FAA, Policy and Innovation Division, 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 5, 2018.

**Melvin J. Johnson,**

*Deputy Director, Policy & Innovation Division, Aircraft Certification Service.*

[FR Doc. 2018-02608 Filed 2-9-18; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2018-0104; Product Identifier 2017-CE-036-AD]

RIN 2120-AA64

#### Airworthiness Directives; Gulfstream Aerospace Corporation Airplanes

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede Airworthiness Directive (AD) 2015-24-06, which applies to certain Gulfstream Aerospace Corporation Model GVI airplanes. AD 2015-24-06 requires repetitive breakaway torque checks and torquing of the main landing gear (MLG) brake inlet self-sealing couplings and inserting a dispatch and takeoff limitation to the Limitations section of the airplane flight manual. Since we issued AD 2015-24-06, a modification of the MLG and brake assembly has been developed that when incorporated would terminate the need for the repetitive actions of AD 2015-24-06. This proposed AD would require modifying the MLG and brake assembly. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by March 29, 2018.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, 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:** Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Gulfstream Aerospace Corporation, P.O. Box 2206, Savannah, Georgia 31404-2206; telephone: (912) 965-3000; fax: (912) 965-3520; email: [pubs@gulfstream.com](mailto:pubs@gulfstream.com); internet: [www.gulfstream.com](http://www.gulfstream.com). You may view this service information at the FAA, Policy and Innovation Division, 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-2018-0104; 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 NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

#### FOR FURTHER INFORMATION CONTACT:

Gideon Jose, Aerospace Engineer, Altanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; phone: 404-474-5569; fax: 404-474-5606; email: [gideon.jose@faa.gov](mailto:gideon.jose@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-2018-0104; Product Identifier 2017-CE-036-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy

aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM 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 proposed AD.

#### Discussion

We issued AD 2015-24-06, Amendment 39-18338 (80 FR 75788, December 4, 2015) ("AD 2015-24-06"), for certain Gulfstream Aerospace Corporation (Gulfstream) Model GVI airplanes. AD 2015-24-06 requires repetitive breakaway torque checks and torquing of the MLG brake inlet self-sealing couplings. AD 2015-24-06 also requires inserting a dispatch and takeoff limitation to the Limitations section of the airplane flight manual to include procedures to follow if certain display indications occur. AD 2015-24-06 resulted from reports of the self-sealing couplings on the MLG brake inlet fitting backing out of the fully seated position. This unsafe condition could lead to loss of hydraulic pressure to the affected brake. We issued AD 2015-24-06 to detect and correct inadequate torque on the self-sealing couplings and prevent loss of braking capability on one or multiple brakes, which could lead to runway overrun or asymmetrical braking that could result in lateral runway excursion.

#### Actions Since AD 2015-24-06 Was Issued

Since we issued AD 2015-24-06, a modification for the MLG and brake assembly has been developed that eliminates the self-sealing coupling and uses a permanent hose design. This modification when incorporated would terminate the need for the repetitive breakaway torque checks and torquing of the brake inlet self-sealing couplings.

#### Related Service Information Under 14 CFR Part 51

We reviewed Gulfstream G650 Customer Bulletin Number 155B, dated July 26, 2017; and Gulfstream G650ER Customer Bulletin Number 155B, dated July 26, 2017. For the applicable model designations, this service information describes procedures to modify the MLG and brake assemblies. 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.