DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120-AA64

Airworthiness Directives; Stemme AG (Type Certificate Previously Held by Stemme GmbH & Co. KG) Gliders

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Stemme AG (type certificate previously held by Stemme GmbH & Co. KG) Model Stemme S 12 gliders. 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 identifies the unsafe condition as a deviation in the construction of the connection of the inner wing to the outer wing, resulting in a wrong positioning of the glass-fiber reinforced plastic (GFRP) blocks. This AD requires inspecting the left-hand (LH) and right-hand (RH) outer wing spars for correct positioning of the GFRP blocks and, if incorrect positioning is found, repairing of the reinforcement blocks. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective July 26, 2022.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of July 26, 2022.

The FAA must receive comments on this AD by August 25, 2022.

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 https://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- 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 final rule, contact Stemme AG, Flugplatzstrasse F2 Nr. 6-7, Strausberg, Germany; phone: +49 3341 3612 0; email: airworthiness@stemme.de; website: https://stemme.com. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0809.

Examining the AD Docket

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0809; 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 final rule, the MCAI, any comments received, and other information. The street address for the Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Jim Rutherford, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4165; email: jim.rutherford@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Emergency AD 2022-0101-E, dated June 2, 2022 (referred to after this as “the MCAI”), to address an unsafe condition on certain serial-numbered Stemme AG Model Stemme S12 powered sailplanes (gliders). The MCAI states:

An occurrence was reported by the production line of the Stemme S12 of finding a deviation in the construction of the connection of the inner wing to the outer wing, resulting in a wrong positioning of the glass-fibre reinforced plastic (GFRP) blocks in the outer wing spar.

This condition, if not corrected, could lead to loss of structural integrity at the joint (connection) between the outer wing and inner wing, possibly resulting in rupture of the affected wing, with consequent loss of control of the sailplane.

To address this potential unsafe condition, Stemme identified the sailplanes possibly affected by this unintended production deviation and issued the SB [service bulletin], as defined in this [EASA] AD, to provide instructions to determine the (correct) positioning of the GFRP blocks in the outer wing spars.

For the reasons described above, this [EASA] AD requires a one-time inspection of each affected part and, depending on findings, accomplishment of applicable corrective action(s).

This [EASA] AD is considered to be an interim action and further AD action may follow.
You may examine the MCAI in the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0809.

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

The FAA reviewed Stemme Procedural Instruction P320-912060, Revision 00, dated May 20, 2022. This service information specifies procedures for inspecting the LH and RH outer wing spars for correct positioning of the GFRP reinforcement blocks, including sealing the inspection holes. 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 ADDRESSES.

**Other Related Service Information**

The FAA also reviewed Stemme Service Bulletin P062-980060, Revision 00, dated May 20, 2022. This service information specifies inspecting the LH and RH outer wing spars for correct positioning of the GFRP reinforcement blocks by following Stemme Procedural Instruction P320-912060, Revision 00, dated May 20, 2022. This service information also prohibits operation and informing Stemme AG if incorrect positioning is found.

**FAA’s Determination**

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this AD because it has determined the unsafe condition described previously is likely to exist or develop on other products of the same type design.

**AD Requirements**

This AD requires accomplishing the actions specified in the service information already described, except as discussed under “Differences Between this AD and the MCAI.”

**Differences Between This AD and the MCAI**

The MCAI specifies contacting Stemme for approved corrective action instructions, and this AD requires using a repair method approved by the FAA, EASA, or Stemme AG’s Design Organization Approval.

**Interim Action**

The FAA considers this AD to be an interim action. The design approval holder is currently developing a modification that will address the unsafe condition identified in this AD. Once this modification is developed, approved, and available, the FAA might consider additional rulemaking.

**Justification for Immediate Adoption and Determination of the Effective Date**

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 et seq.) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.
An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because loss of structural integrity between the inner and outer wing sections could cause a sudden rupture of the affected wing and consequent loss of glider control. Therefore, the inspection and any necessary repair must be accomplished before further flight. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forego notice and comment.

Comments Invited

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2022-0809 and Project Identifier MCAI-2022-00711-G” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to https://www.regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Jim Rutherford, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because FAA has determined that it has good cause to adopt this rule without prior notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 21 gliders of U.S. registry. The FAA estimates the following costs to comply with this AD:
The FAA estimates the following costs to replace reinforcement blocks on both sides, if required based on the results of the inspection. The FAA has no way of determining the number of gliders that might need this action:

### Estimated Costs

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per glider</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspect reinforcement blocks</td>
<td>2 work-hours × $85 per hour = $170</td>
<td>$100</td>
<td>$270</td>
<td>$5,670</td>
</tr>
</tbody>
</table>

### On-Condition Costs

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per glider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace both reinforcement blocks</td>
<td>16 work-hours × $85 per hour = $1,360</td>
<td>$1,000</td>
<td>$2,360</td>
</tr>
</tbody>
</table>

### 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.

The FAA is 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

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, and
2. Will not affect intrastate aviation in Alaska.

### List of Subjects in 14 CFR Part 39

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

### 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 airworthiness directive:
2022-14-11 Stemme AG (Type Certificate Previously Held by Stemme GmbH & Co. KG):
Amendment 39-22116; Docket No. FAA-2022-0809; Project Identifier MCAI-2022-00711-G.

(a) Effective Date

This airworthiness directive (AD) is effective July 26, 2022.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Stemme AG (type certificate previously held by Stemme GmbH & Co. KG) Model Stemme S 12 gliders, serial numbers 12-002 through 12-042 inclusive and serial number 12-044, certificated in any category.

(d) Subject


(e) Unsafe Condition

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 identifies the unsafe condition as a deviation in the construction of the connection of the inner wing to the outer wing, resulting in a wrong positioning of the left-hand (LH) and right-hand (RH) outer wing spar glass-fiber reinforced plastic (GFRP) blocks. The FAA is issuing this AD to detect wrong positioning of the GFRP blocks, which, if not corrected, could cause a rupture of the affected wing and consequent loss of control of the glider.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection and Replacement

Before further flight after the effective date of this AD, inspect the LH and RH outer wing spars for positioning of the GFRP blocks by following Working Steps 1.1 through 3.2 in Stemme Procedural Instruction P320-912060, Revision 00, dated May 20, 2022.

(1) If a GFRP block is correctly positioned, seal the inspection holes by following Working Steps 4.1 through 4.3 in Stemme Procedural Instruction P320-912060, Revision 00, dated May 20, 2022.

(2) If a GFRP block is incorrectly positioned, before further flight, repair using a method approved by the FAA; the European Union Aviation Safety Agency (EASA); or Stemme AG's
Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(h) Alternative Methods of Compliance (AMOCs)

1. The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (i)(1) of this AD and email to: 9-AVS-AIR-730-AMOC@faa.gov.

2. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

1. For more information about this AD, contact Jim Rutherford, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4165; email: jim.rutherford@faa.gov.


(j) Material Incorporated by Reference

1. The Director of the Federal Register approved the incorporation by reference 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 this AD specifies otherwise.

   (i) Stemme Procedural Instruction P320-912060, Revision 00, dated May 20, 2022. Note 1 to paragraph (j)(2)(i): This service information contains German to English translation. EASA used the English translation in referencing the document from Stemme. For enforceability purposes, the FAA will cite the service information in English as it appears on the document. Note 2 to paragraph (j)(2)(i): Only the first page of the document contains the document date.

   (ii) [Reserved]

3. For service information identified in this AD, contact Stemme AG, Flugplatzstrasse F2 Nr. 6-7, Strausberg, Germany; phone: +49 3341 3612 0; email: airworthiness@stemme.de; website: https://stemme.com.

4. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

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, email: fr.inspection@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on June 29, 2022.
Christina Underwood,
Acting Director, Compliance & Airworthiness Division, Aircraft Certification Service.