Airworthiness Directive

AD No.: 2019-0082
Issued: 12 April 2019

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder’s Name: STEMME AG
Type/Model designation(s): S 12 powered sailplanes

Effective Date: 26 April 2019
TCDS Number(s): EASA.A.054
Foreign AD: Not applicable
Supersede: None

ATA 34 – Navigation – Airspeed Indicator – Inspection / Replacement

Manufacturer(s):
Stemme AG

Applicability:
S 12 powered sailplanes, serial numbers 12-002 to 12-021 inclusive.

Definitions:
For the purpose of this AD, the following definitions apply:

Affected part: Airspeed indicators (ASI) having Stemme Part Number (P/N) IF-W230 (unit: knots) or Stemme P/N IF-W190 (unit: kph), except those that have passed (no non-conformities found) an inspection in accordance with the instructions of the SB.

Serviceable part: Any ASI with correct markings, as applicable to configuration.

The SB: Stemme AG Service Bulletin (SB) P062-980027.

Reason:
During a production inspection of a new powered sailplane, an ASI was found with speed markings inconsistent with the approved and published values (begin of the white and green arc). Subsequent investigation of the production records for delivered Stemme S 12 powered sailplanes does not exclude that a similar, non-conforming ASI was installed during production.
This condition, if not corrected, could lead to erroneous information being provided to the pilot, particularly at the lower speed operation limits, possibly resulting in reduced control of the powered sailplane.

To address this unsafe condition, Stemme AG issued the SB to provide inspections instructions.

For the reason described above, this AD requires a one-time inspection of the markings of the affected part and, depending on findings, amending the Aircraft Flight Manual (AFM) and replacing the affected part. This AD also prohibits installation of affected parts.

**Required Action(s) and Compliance Time(s):**
Required as indicated, unless accomplished previously:

**Inspection:**
(1) Within 30 days after the effective date of this AD, inspect the markings of the ASI in accordance with the instructions of the SB, or in accordance with the applicable AFM, Chapter 2.3.

**AFM Change:**
(2) If, during the inspection as required by paragraph (1) of this AD, discrepancies are detected as identified in the SB, before next flight, insert the temporary AFM page 2-3SB, as attached to the SB, into the AFM.

**Replacement:**
(3) If, during the inspection as required by paragraph (1) of this AD, discrepancies are detected as identified in the SB, within 3 months after the effective date of this AD, or during the next scheduled maintenance visit after the inspection as required by paragraph (1) of this AD, whichever occurs first, replace the affected part with a serviceable part.

(4) After removal of the affected part from a powered sailplane, as required by paragraph (3) of this AD, the AFM page 2-3SB can be removed from the AFM of that powered sailplane.

**Parts Installation:**
(5) From the effective date of this AD, it is allowed to install an ASI on any powered sailplane, provided it is a serviceable part, as defined in this AD.

**Ref. Publications:**
Stemme AG SB P062-980027 original issue, dated 17 December 2018.

The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.

**Remarks:**
1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.

2. The result of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the EU aviation safety reporting system.

5. For any question concerning the technical content of the requirements in this AD, please contact: Stemme AG, Flugplatzstrasse F2 Nr. 6-7, 15344 Strausberg, GERMANY Telephone: +49 3341 3612 0, FAX: +49 3341 3612 30, E-mail: airworthiness@stemme.de.
**Austausch der Fahrtmesser Stemme S12**

*Replacement of airspeed indicators Stemme S12*

Der technische Inhalt dieses Dokuments ist unter der Verantwortlichkeit DOA Ref. EASA.21J.250 genehmigt. 

*The technical content of this document is approved under the authority of DOA ref. EASA.21J.250.*

<table>
<thead>
<tr>
<th>EASA</th>
<th>☒</th>
<th>Mandatory (Verbindlich)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD-N°:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEMME</td>
<td>☒</td>
<td>Mandatory (Verbindlich)</td>
</tr>
<tr>
<td>☐</td>
<td>Recommended (Empfohlen)</td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td>Optional</td>
<td></td>
</tr>
</tbody>
</table>

**Gegenstand:**

Überprüfung / Austausch bisher verbauter WINTER-Fahrtmesser. Die Markierungen auf den Fahrtmessern entsprechen nicht den definierten Werten für die Stemme S12.

**Subject:**

Check / Replacement of previously built-in WINTER-airspeed indicator (ASI). The markings are not in compliance with the defined ranges for the Stemme S12.

**Betroffene Flugzeuge:**

<table>
<thead>
<tr>
<th>Muster / Type:</th>
<th>Stemme S10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baureihe(n) / Variant(s):</td>
<td>Stemme S12</td>
</tr>
<tr>
<td>Kennblatt / TCDS:</td>
<td>EASA.A.054, G06CE (FAA) and other national type acceptances</td>
</tr>
<tr>
<td>Werknummer(n) / S/N:</td>
<td>12-002 bis / up to 12-021</td>
</tr>
</tbody>
</table>

**Dringlichkeit:**

Maßnahme 1: Vor dem nächsten Flug.

Maßnahme 2: innerhalb von 3 Monaten nach Veröffentlichung oder bei dem nächsten geplanten Wartungseignis, je nachdem was früher eintritt.

**Time of Compliance:**

Action 1: Before the next flight

Action 2: within 3 months after publication or next scheduled maintenance, whatever occurs first.

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**Erstellt:** Ortwein  
**Kurzzeichen:**  
**MPI geprüft:** CVE Checked  
**Ersetzt Rev. vom:**  
**MPL freigegeben:**  
**Datum:** 17 Dec 2018  
**Issue:** 14 Jul 2017
Anlass:

Maßnahmen:
Für alle betroffenen Werknummern:

Maßnahme 1:
Überprüfung der Markierungen am Fahrtmesser entsprechend der Vorgaben im Flughandbuch (Kapitel 2.3.).

Wenn der Fahrtmesser betroffen ist:
- Einfügen einer temporären Flughandbuchseite im Flughandbuch (Seite 2-3 SB)
- Durchführung Maßnahme 2

Maßnahme 2:
Austausch des betroffenen Fahrtmessers durch einen neuen Fahrtmesser mit korrekten Markierungen (s. Tabelle unten).

Reason:
The WINTER-airspeed indicator used in the referenced serial numbers of the Stemme S12 may have an incorrect marking at the start values for the green and white arc. This can cause a misinformation for the pilot at the lower operation limits.

Actions:
For all affected serial numbers:

Action 1:
Check the markings of the ASI in accordance with the applicable Aircraft Flight Manual (chapter 2.3.).

If the ASI is affected:
- Insertion of a temporary Flight Manual page into the aircraft associated AFM (page 2-3 SB)
- Execution of action 2

Action 2:
Replacement of the affected airspeed indicator with a new airspeed indicator with correct markings (see table below).

<table>
<thead>
<tr>
<th>Fahrtmesser mit falscher Markierung/ASI with incorrect marking</th>
<th>Skalierung, Durchmesser / scaling, diameter</th>
<th>Austausch Art-Nr. / replacement P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typ/type: Winter 7 FMS 421 Winter P/N: 7421 342 Stemme P/N: IF-W190</td>
<td>0-300 km/h, 57mm</td>
<td>Typ/type: Winter 7 FMS 421 WINTER P/N: 7421 700 STEMME P/N: 832302</td>
</tr>
</tbody>
</table>
Die unten angeordneten Bilder zeigen die korrekt markierten Fahrtmesser beider Bauformen.

STEMME P/N 832303
Fahrtmesser STEMME S12 [kt] / 
ASI STEMME S12 [kt]

Both versions of the airspeed indicators with correct markings are shown in the illustrations below.

Stemme P/N: 832302
Fahrtmesser STEMME S12 [km/h] / 
ASI STEMME S12 [kph]

Arbeitsschritte für den Austausch des Fahrtmessers:

1. Demontiere den eingebauten Fahrtmesser vom Instrumentenbrett (4 Schrauben)
2. Trenne die pneumatischen Schläuche vom Fahrtmesser
3. Verbinde die pneumatischen Schläuche mit dem neuen Fahrtmesser entsprechend der Markierung auf der Instrumentenrückseite - Gesamtdruck = “rot” markierter Schlauch
   Statischer Druck = „blau“ markierter Schlauch
4. Einbau des Fahrtmessers im Instrumentenbrett (mit den mitgelieferten Schrauben)
5. Funktions- und Dichtheitsprüfung
6. Aktualisierung des zum Flugzeug gehörenden Ausrüstungsverzeichnisses

Material und Unterlagen:

- Standard Mechanikerwerkzeugset (metrisch)

Procedure for the replacement of the airspeed indicator:

1. Remove the installed airspeed indicator from the instrument panel (4 screws)
2. Disconnect both pressure lines from the airspeed indicator
3. Connect the new ASI to both pressure lines in accordance with the markings on the instrument backside—
   Total Pressure = “red” marked pressure line
   Static Pressure = “blue” marked pressure line
4. Install the new airspeed indicator to the instrument panel (use the enclosed screws)
5. Function check and leak test
6. Update the current aircraft associated equipment list

Material and Documents:

- Standard mechanic tool set (metric)
Technische Mitteilung

Service Bulletin

- Wartungshandbuch Stemme S12
- Fahrtmesser STEMME P/N: 832303 (0-160 knots, 57mm)
  or
- Fahrtmesser STEMME P/N: 832302 (0-300 km/h, 57mm)

Masse und Schwerpunkt:

Nicht betroffen.

Hinweise:
- Die aufgeführte Maßnahme 2 kann nur von entsprechend genehmigten Instandhaltungsbetrieben durchgeführt und bescheinigt werden.
- Die aufgeführte Maßnahme 1 kann im Rahmen der Pilot/Owner Maintenance durchgeführt werden und muss entsprechend freigegeben werden.

Anhang:
1 Seite:
Temporäre Flughandbuchseite 2-3 SB
L400-SB 980027 ISSUE DEC 04 2018

- Aircraft Maintenance Manual
  STEMME S12
- ASI STEMME P/N: 832303
  (0-160 knots, 57mm)
  or
- ASI STEMME P/N: 832302
  (0-300 km/h, 57mm)

Mass and Balance:

Not affected.

Remarks:
- The action 2 may only be carried out and certified by appropriately approved maintenance organizations.
- The action 1 may be carried out within the rules for Pilot/Owner-Maintenance and needs to be released in accordance with the applicable rules.

Appendix:
1 page:
Temporary Flight Manual page 2-3 SB
L400-SB 980027 ISSUE DEC 04 2018
2.3. AIRSPEED INDICATOR MARKINGS

**NOTICE**

This page is associated with the Service Bulletin P062-980027 „Replacement of Airspeed Indicators Stemme S12” and is to be inserted temporarily until action 2 of the Service Bulletin has been performed.

The table below explains the marking deviations on affected airspeed indicators versus Stemme S12 certified values:

<table>
<thead>
<tr>
<th>Marking</th>
<th>IAS correct values</th>
<th>IAS incorrect values</th>
<th>Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>White arc – begin of arc</td>
<td>88 kph 48 kt</td>
<td>85 kph 46 kt</td>
<td>3 kph 2 kt</td>
</tr>
<tr>
<td>Green arc – begin of arc</td>
<td>96 kph 52 kt</td>
<td>90 kph 49 kt</td>
<td>6 kph 3 kt</td>
</tr>
</tbody>
</table>

**CAUTION**

The operation with the misleading indicated airspeed can cause unintended flight situations.