

**2010-11-08 Stemme GmbH & Co. KG:** Amendment 39-16313; Docket No. FAA- 2008-0788; Directorate Identifier 2008-CE-039-AD.

### **Effective Date**

(a) This airworthiness directive (AD) becomes effective July 6, 2010.

### **Affected ADs**

(b) This AD supersedes AD 2008-11-20, Amendment 39-15543.

### **Applicability**

(c) This AD applies to Model S10-VT powered sailplanes, serial numbers 11-001 through 11-112, certificated in any category.

### **Subject**

(d) Air Transport Association of America (ATA) Code 28: Fuel.

### **Reason**

(e) The mandatory continuing airworthiness information (MCAI) states:

AD 2007-0315-E was issued to address a possible fuel leakage in the gear compartment in front of the engine and mandated inspections and replacement of fuel plastic-made connectors by connectors made of metal. Since its publication, another fuel leakage has been reported on a S10-VT which had implemented the STEMME Service Bulletin (SB) A31-10-082 as required by AD 2007-0315-E.

It has been determined that the fuel leak may have been caused by the deformation that the originally installed clamps created on the fuel hoses and thus preventing the new clamps from being sufficiently pinched to perform a correct tightening.

The present Airworthiness Directive (AD) supersedes AD 2007- 0315-E and requires you to check the fuel system according to the STEMME SB A31-10-083 as well as to replace single-ear clamps and plastic connectors.

The actions specified by this AD are intended to reduce the potential for a fire to ignite and which could lead to loss of control of the sailplane.

### **Actions and Compliance**

(f) Unless already done, do the following actions:

(1) For all sailplanes affected by this AD, except for serial numbers 11-036, 11-067, 11-068, and 11-090: Before further flight after March 21, 2008 (the compliance date retained from AD 2008-03-06, which was superseded by AD 2008-11-20), replace all plastic T- and Y-connectors in the fuel system with metal connectors. Do the replacements following STEMME F & D Service Bulletin A31-10-082, AM.-Index: 01.a, dated November 30, 2007, or STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.b, dated May 6, 2009.

Note 1: Serial numbers 11-036, 11-067, 11-068, and 11-090 had the plastic T- and Y-connectors in the fuel system replaced with metal connectors by the manufacturer.

(2) For all sailplanes affected by this AD: Before further flight after June 23, 2008 (the compliance date retained from AD 2008-11-20), inspect the fuel system for possible leakage. Do the inspection following STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.a, dated February 26, 2008, or STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.b, dated May 6, 2009.

(3) For all sailplanes affected by this AD: If any leak is found during the inspection required in paragraph (f)(2) of this AD, before further flight, repair the leak following an FAA-approved procedure and replace all STEMME part number (P/N) M476 single-ear clamps in the fuel system with P/N 10M-181 single-ear clamps. Contact the manufacturer at the address specified in paragraph (i)(4) of this AD to obtain an FAA-approved repair procedure. Do the replacements following STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.a, dated February 26, 2008, or STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.b, dated May 6, 2009.

(4) For sailplanes that had P/Ns M476 replaced with P/Ns 10M-181 in compliance with AD 2008-11-20: Before further flight after July 6, 2010 (the effective date of this AD), do a leak test as specified in STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.a, dated February 26, 2008, or STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.b, dated May 6, 2009.

(5) For sailplanes that had P/Ns M476 replaced with P/Ns 10M-181 in compliance with AD 2008-11-20: If a leak is found during the leak test required in paragraph (f)(4) of this AD, before further flight, repair the leak following an FAA-approved procedure. Contact the manufacturer at the address specified in paragraph (i)(4) of this AD to obtain an FAA-approved repair procedure.

(6) For all sailplanes affected by this AD: If no leak is found during the inspection required in paragraph (f)(2) of this AD, within the next 12 months after July 6, 2010 (the effective date of this AD), replace all P/Ns M476 in the fuel system with P/Ns 10M-181. Do the replacements following STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.a, dated February 26, 2008, or STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.b, dated May 6, 2009.

(7) For all sailplanes affected by this AD: Before further flight after doing the replacement required in paragraph (f)(6) of this AD, do a leak test as specified in STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.a, dated February 26, 2008, or STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.b, dated May 6, 2009.

(8) For all sailplanes affected by this AD: If a leak is found during the leak test required in paragraph (f)(7) of this AD, before further flight, repair the leak following an FAA-approved procedure. Contact the manufacturer at the address specified in paragraph (i)(4) of this AD to obtain an FAA-approved repair procedure.

(9) For all sailplanes affected by this AD: After June 23, 2008 (the compliance date retained from AD 2008-11-20), do not install plastic "T" and "Y" shape connectors and P/N M476 single-ear clamps in the fuel system.

### **FAA AD Differences**

Note 2: This AD differs from the MCAI and/or service information as follows: No differences.

### **Other FAA AD Provisions**

(g) 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: Greg Davison, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4130; fax: (816) 329-4090. 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.

### **Related Information**

(h) Refer to MCAI European Aviation Safety Agency (EASA) Emergency AD No. 2008-0053-E, dated March 5, 2008; STEMME F & D Service Bulletin A31-10-082, AM.-Index: 01.a, dated November 30, 2007; STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.a, dated February 26, 2008; and STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.b, dated May 6, 2009, for related information.

### **Material Incorporated by Reference**

(i) You must use STEMME F & D Service Bulletin A31-10-082, AM.- Index: 01.a, dated November 30, 2007; STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.a, dated February 26, 2008; and STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.b, dated May 6, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.b, dated May 6, 2009, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) On June 23, 2008 (73 FR 31355, June 2, 2008), the Director of the Federal Register previously approved the incorporation by reference of STEMME F & D Service Bulletin A31-10-083, Am-Index: 01.a, dated February 26, 2008, listed in this AD.

(3) On February 20, 2008 (73 FR 5733, January 31, 2008), the Director of the Federal Register previously approved the incorporation by reference of STEMME F & D Service Bulletin A31-10-082, AM.-Index: 01.a, dated November 30, 2007, listed in this AD.

(4) For service information identified in this AD, contact STEMME GmbH & Co. KG, Flugplatzstraße F 2, Nr. 7, 15344 Strausberg, Federal Republic of Germany; Internet: <http://www.stemme.de/man/>.

(5) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(6) You may also review copies of the service information incorporated by reference for this AD 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/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).