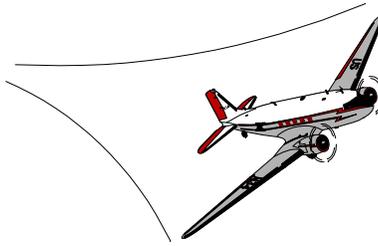


SPECIAL AIRWORTHINESS INFORMATION BULLETIN



U.S. Department
of Transportation
**Federal Aviation
Administration**

AIRCRAFT CERTIFICATION SERVICE
800 INDEPENDENCE AVENUE, S.W.
WASHINGTON, DC 20591

No. ACE-98-15
December 10, 1997

Published by: FAA, AFS-610, P.O. Box 26460, Oklahoma City, OK 73125

This is issued for informational purposes only and any recommendation for corrective action is not mandatory.

The purpose of this Special Airworthiness Information Bulletin (SAIB) is to provide safety information to Stemme Models S10 and S10-V sailplane owners on the following:

- Model S10: Pitot Tube May Come Loose From Vibration (Service Bulletin No. A31-10-003) [See Note 1].
- Models S10 and S10-V: Deposits in the Induction Manifold (Service Bulletin No. A31-10-021) [See Note 1].
- Model S10: Cracks in Rear Horizontal Stabilizer Fitting (Service Bulletin No. A31-10-022) [See Note 1].
- Model S10-V: Modification of the Variable Pitch Propeller (Service Bulletin No. A31-10-020) [See Note 1].

NOTE 1: Possible Airworthiness Directive actions are currently being evaluated for these selected service difficulty issues.

Background

The FAA is currently conducting an assessment of foreign airworthiness directives that have been issued by the German Luftfahrt-Bundesamt (LBA) on German type certificated sailplanes. The LBA has issued German airworthiness directives on the service difficulty issues listed above. The FAA is currently assessing the need to issue corresponding U.S. airworthiness directives on U.S. type certificated Model S10 and S10-V sailplanes. In the interim, the FAA is using this Special Airworthiness Information Bulletin to inform U.S. owners of this model sailplane of the service difficulties reported by the manufacturer. If an airworthiness directive is determined to be appropriate, a Notice of Proposed Rulemaking will be issued. The following is a brief description of the main areas of each issue.

Pitot Tube May Come Loose From Vibration (Service Bulletin No. A31-10-003).

Stemme has determined through service history that the pitot tube may come loose from airframe vibrations. This is a result of the “O Ring” material being too soft to secure the pitot tube in place. To eliminate this possibility, Stemme has issued Service Bulletin No. A 31-10-003 that requires installation of a new “O Ring”. For your information, LBA Airworthiness Directive 92-197 is enclosed as well as Stemme Service Bulletin A31-10-003. The FAA highly encourages you to determine if this modification has been accomplished on your sailplane. If this modification has not been accomplished, the manufacturer has estimated that it will take approximately one hour to install the new “O Ring” and one hour to revise the Flight Manual. Stemme GmbH has “O Rings” available. The Flight Manual revision is included with this SAIB.

Deposits in the Induction Manifold (Service Bulletin No. A31-10-021).

Stemme has determined through service history that several aircraft were found to have deposits in the engine induction manifold. These deposits build over operational time. There have been two engine failures where the suspected cause was segments of the deposits breaking/flaking off of the manifold causing the intake valves to stick open. To eliminate this possibility, Stemme has issued Service Bulletin No. A31-10-021 requires: 1) use of AVGAS 100 LL fuel only, 2) Inspection of the Fuel Filters, and 3) Inspection of the engine in accordance with LIMBACH Service Bulletin Number 47. For your information, LBA Airworthiness Directive 95-273 is enclosed as well as Stemme Service Bulletin No. A 31-10-021 (pages 3 & 4; pages 1 & 2 are in the German language) and LIMBACH Service Bulletin Number 47. The FAA highly encourages you to determine if this inspection has been accomplished on your sailplane. If this inspection has not been accomplished, the manufacturer has estimated that it will take approximately four hours to inspect the fuel filters, one hour to revise the Flight Manual, and ten hours to inspect the engine.

Model S10: Cracks in Rear Horizontal Stabilizer Fitting (Service Bulletin No. A31-10-022).

Stemme has determined through service history that several aircraft were found to have concentrated cracks forming in the horizontal stabilizer fitting. If this component fails, this can cause the potential loss of the empennage. To eliminate this possibility, Stemme has issued Service Bulletin No. A31-10-022 which requires the installation of a new designed fitting. For your information, LBA Airworthiness Directive 96-300 is enclosed as well as Stemme Service Bulletin No. A31-10-022 (pages 4 - 6; pages 1 - 3 are in the German language) and Stemme Service Bulletin No. A31-10-008 (pages 5 - 8; pages 1 - 4 are in the German language). The FAA highly encourages you to determine if this new fitting has been installed in your sailplane. If this modification has not been accomplished, the manufacturer has estimated that it will take approximately two hours to complete. Stemme has the parts available to accomplish this modification. The cost is approximately \$200.00 U.S. dollars.

Model S10-V: Modification of the Variable Pitch Propeller (Service Bulletin No. A31-10-020).

Stemme has determined through service history that the thread end groove area design of the propeller should have a limited Time Before Overhaul (TBO) of 100 hours time in service. Stemme has developed new designed propeller blade suspension forks that eliminates the 100 hour TBO for the current propeller design. Stemme has issued Service Bulletin No. A31-10-020 that specifies the design changes that will eliminate the current TBO. For your information, LBA Airworthiness Directive 95-177/2 is enclosed as well as Stemme Service Bulletin No. A31-10-020. The FAA highly encourages you to install the new design blade suspension forks when the 100 hour TBO of the existing propeller has expired. The manufacturer has estimated that it will take approximately six hours to complete this modification. Stemme has the parts available to accomplish this modification. The cost is approximately \$950.00 U.S. dollars.

Additional Information

The FAA has issued the following Airworthiness Directives (AD) on the Stemme Model S10. This information is provided to you for your information only.

- AD 95-17-08; Modify the rudder control cable system in accordance with Service Bulletin A31-10-018 to prevent the control system failure caused by rupture of the turnbuckle eye bolt.

For Further Information Contact:

Stemme GmbH & Co. KG, Gustav-Meyer-Allee 25, D-13355 Berlin, Germany; Telephone 49.3341.3111.70; Facsimile 49.3341.3111.73.

Stemme USA, Inc., United States Dealer for Stemme GmbH & Co. KG, 1401 South Brentwood Blvd, Suite 760, Saint Louis, Missouri, 63144; Telephone (314) 721-5904; Facsimile (314) 726-5114.

Mike Kiesov, Aerospace Engineer/Pilot, FAA, Small Airplane Directorate, 1201 Walnut, Kansas City, Missouri, 64106; telephone (816) 426-6934; Facsimile (816) 426-2169.