



GFA AIRWORTHINESS DIRECTIVE

- TYPE AFFECTED:** ASW 27, serial numbers 27001 to 27104 and 27106 to 27118.
- SUBJECT:** (A) Product improvement;
(B) Amendments to Flight, Maintenance and Repair Manuals
- BACKGROUND:** A number of changes have been made to the flap and water ballast systems of aircraft in the above serial number ranges, together with amendments to the aircrafts' manuals.
- DOCUMENTATION:** LBA Airworthiness Directive 2000-305 and Schleicher Technical Note No 6 form part of this AD.
- ACTION REQUIRED:** Carry out actions as required by the LBA and Schleicher documents referred to above.
- WEIGHT AND BALANCE:** The effect on weight and balance is negligible.
- IMPLEMENTATION:** As per LBA and Schleicher documents.
- COMPLIANCE:** The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.

SIGNED:

[Handwritten Signature]
for



CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

THE GLIDING FEDERATION
OF AUSTRALIA



**Airworthiness
Directive
2000-305**

Luftfahrt-Bundesamt
Airworthiness Directive Section
Hermann-Blenk-Str. 26
38108 Braunschweig
Federal Republic of Germany

Alexander Schleicher

Effective Date: October 05, 2000

Affected:

Kind of aeronautical product: Sailplane
Manufacturer: Alexander Schleicher, Poppenhausen, Germany
Type: ASW 27
Models affected: all
Serial numbers affected: 27001 up to 27104 and 27106 up to 27118
German Type Certificate No.: 389

Subject:

Exchange of pages into the Flight-, Maintenance- and Repair Manual.

Reason:

In case of continuous airworthiness the manufacturer corrected and modified some pages of the Flight-, Maintenance- and Repair Manual.

Action:

Exchange of some pages into the Flight-, Maintenance- and Repair Manual in accordance with the instructions given in the Technical Note of the manufacturer (action „B“ of the Technical Note).

Compliance:

The exchange of the Aircraft Documents must be done before the next annual inspection, but not later than December 31, 2000.

Technical publication of the manufacturer:

Alexander Schleicher ASW 27 Technical Note No. 6 dated May 16, 2000 which becomes herewith part of this AD and may be obtained from Messrs.:

Alexander Schleicher
GmbH & Co.
Segelflugzeugbau

D- 36163 Poppenhausen
Federal Republic of Germany
Phone: ++ 49 6658 89-0, Fax: ++ 49 6658 89-40
Mail: sales@alexander-schleicher.de

Accomplishment and log book entry:

Action to be accomplished by an approved service station and to be checked and entered in the log book by a licensed inspector.

Holdings of affected aircraft registered in Germany have to observe the following:

As a result of the a.m. deficiencies, the airworthiness of the aircraft is affected to such an extent that after the expiry of the a.m. dates the aircraft may be operated only after proper accomplishment of the prescribed actions. In the interest of aviation safety outweighing the interest of the receiver in a postponement of the prescribed actions, the immediate compliance with this AD is to be directed

Instructions about Available Legal Remedies:

An appeal to this notice may be raised within a period of one month following notification. Appeals must be submitted in writing or registered at the Luftfahrt-Bundesamt, Hermann-Blenk-Str. 26, 38108 Braunschweig.

Enquiries regarding this Airworthiness Directive should be referred to Mr. Olaf Schneider, Airworthiness Directive Section at the above address, fax-no. 0049 531/2355-720. Please note, that in case of any difficulty, reference should be made to the German issue!

Datum der Bekanntgabe: 05.10.2000

Muster: Schleicher
ASW 27

AD der ausländischen Behörde:
-keine-

Geräte-Nr.:
389

Technische Mitteilungen des Herstellers:
Alexander Schleicher ASW 27 Technische Mitteilung Nr.6 vom
16.05.2000

Betroffenes Luftfahrtgerät:

Schleicher
ASW 27

- Baureihen: alle

- Werk-Nrn.: 27001 bis 27104 und 27106 bis 27118

Betrifft:

Flug-, Wartungs- und Reparaturhandbuch

- die Unterlagen zum Betrieb des Luftfahrzeuges wurden vom Hersteller überarbeitet und müssen zur Aufrechterhaltung der Lufttüchtigkeit ausgetauscht werden.

Maßnahmen:

Änderung, Erweiterung und Austausch von Seiten im Flug-, Wartungs- und Reparaturhandbuch gemäß den Angaben der Technischen Mitteilung (Maßnahmen "B" der Technischen Mitteilung).

Fristen:

Durchführung bis zur nächsten Jahresnachprüfung, spätestens jedoch bis zum 31.12.2000.

Durch die vorgenannten Mängel ist die Lufttüchtigkeit des Luftfahrtgerätes derart beeinträchtigt, daß es nach Ablauf der genannten Fristen nur in Betrieb genommen werden darf, wenn die angeordneten Maßnahmen ordnungsgemäß durchgeführt worden sind. Im Interesse der Sicherheit des Luftverkehrs, das in diesem Fall das Interesse des Adressaten am Aufschub der angeordneten Maßnahmen überwiegt, ist es erforderlich, die sofortige Vollziehung dieser LTA anzuordnen.

Rechtsbehelfsbelehrung:

Gegen diese Verfügung kann innerhalb eines Monats nach Bekanntgabe Widerspruch eingelegt werden. Der Widerspruch ist schriftlich oder zur Niederschrift beim Luftfahrt-Bundesamt, Hermann-Blenk-Str. 26, 38108 Braunschweig einzulegen.

LTA's werden auch im Internet unter <http://www.lba.de> publiziert

Subject: A) Product improvement.
B) Change and amendments to the Flight, Maintenance and Repair Manuals.

Serial number applicability: All ASW 27, Document No. 389
Serial Number 27105 and serial version as off Serial Number 27119 .
Serial Numbers 27001 through 27104 and 27106 through 27118 .

Compliance: ad A) None, upgrade when the fuselage water ballast valve needs exchange, serial version in new production sailplanes.

ad B) For next annual inspection however prior to 31 December 2000 .

Reason: ad A.1) In order to improve the operation of the water ballast actuator lever this lever is placed more forward into the landing gear gate. Also the operation forces to open the valves are decreased by changing the shape of the lever.
The ball type valve used up to now will be replaced by a back pressure valve. The attachment point of the fuselage tank valve is re-designed.
In order to achieve easier adjustment of the water ballast control system the actuating toggles for the wing water ballast valves are modified.

ad A.2) Additional flap position 3a.

Following operational experience which was also proven in wind tunnel experiments with the ASW 27 wing profile a new flap position 3a (+5°) a small but favourable operational speed range was tested. The old flap position 3 (+12°) is re-numbered as flap position 3b .

ad A.3) Aerobatic manoeuvres according to chapter 4.5.9 of the ASW 27 Flight Manual were not approved when new winglets according to TN 4 were installed. Flight tests for the new winglets were now performed and are aerobic manoeuvres are now approved for the new winglets.

ad A.4) For an ASW 27 which is built including TN2 (wing with integrated wet surface water ballast tanks), TN 4 (new winglets) and this TN 6 at the same time the sailplane is called an ASW 27 B. This ASW 27 B however is not regarded to be a new model variant. It is a new sales definition.

ad B) Flight, Maintenance and Repair Manuals have been corrected and modified as well as amended because of changes of the new water ballast system.

Action: ad A.1) For replacement of the old fuselage water ballast tank valve some minor modifications must be performed:

The water exit port on the lower fuselage surface must be moved about 8 mm forward, see drawing 270.77.9001.

A new water ballast actuating lever must be placed forward. To do so the landing gear gate must be modified or exchanged against a new one, see drawing 270.21.0024.

The forward Bowden cable end fitting as well as the Bowden cable attachment on the fuselage side toggle for water ballast valve operation inside the wings and also at the fuselage water tank valve must be replaced, see Maintenance Instruction B, Issue 2, drawings 270.77.1008 & 270.77.1009.

ad A.2) Drill flap position A (when not yet existent) as well as flap position 3a at the flap lever gate, see drawing 270.45.0015. The correct adjustment of flap position A is found on Maintenance Manual page 3.5. Die adjustment of flap position 3a is the geometric middle between the holes of flap positions 2 and A. A new flap position placard must be installed above and left of the actuating lever.

ad A.3) None. Exchange Flight Manual page 4.23. see B) below !

ad A.4) Optional, action according to TN 2 and TN 4.

ad B) Flight Manual pages 0.4; 0.5; 2.3; 2.5; 4.6 & 4.7; 4.12 & 4.17; 4.23; 5.4; 5.9 & 5.10; 7.4 & 8.5 and Maintenance Manual pages 0.4; 0.5; 2.16; 3.2 through 3.4; 4.5 & 4.7; 7.3; 7.9; 9.6; 12.5 & 12.8 pages must be exchanged against new ones with the revision status „TN 6 dated 01.09.99 JUW“. The Maintenance Manual must be amended by pages 2.40 and 9.9 and Maintenance Instruction B, Issue 2, dated 04.05.99 as well as by the Repair Manual which was itself amended April 1999.

Material and drawings:

See ASW 27 Drawing list, Component 77 dated 01.06.1999
Component 45 dated 01.06.1999
Component 21 dated 01.06.1999

Weight (Mass) and Balance:

The differences in weight are so small that a weight and balance procedure is not necessary.

Notes:

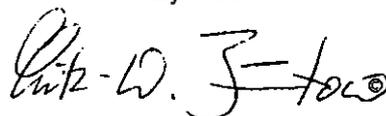
Necessary parts, Manual pages, Maintenance Instructions as well as the amended Repair Manual can be ordered from Alexander Schleicher GmbH & Co., Telephone ++49 6658 890, Fax ++49 6658 - 8940 or via e-mail: sales@alexander-schleicher.de .

Action according to position A.1 & A.2 must only be done by the manufacturer of the sailplane (A:Schleicher) or a repair station approved for such work. Action according to position B may be performed by the owner/operator of the sailplane himself.

All action has to be documented by an inspector authorised for such work during the initial TC checks, or in case of exchange as a major modification in the sailplane's log book and the records of inspections.

Poppenhausen, 16 May 2000

Alexander Schleicher
GmbH & Co.
By order



(Lutz-W. Juntow)

The German original of this Technical Note has been approved by the LBA under the date of **17. MAI 2000** (signed by H. *Fendt*).

The translation into English has been done by best knowledge and judgement; in any case of doubt the German original is controlling.