Sheet		
1	of	3

<ul> <li>Subject:         <ol> <li>Increase of service life of the airframe from 6000 to 12000 hours.</li> <li>Inspection of the elevator control linkage after fuselage and landing gear repairs.</li> <li>Additional safety device for the landing gear rear bolts; change to maintenance inte vals.</li> <li>Insertion of the AD-Note No. 1993-001/3 (covering the compulsory use of safety devices for the L'Hotellier quick-release connectors) into the Flight and Maintenance Manual.</li> </ol></li></ul> <li>Serial number applicability: Sailplane ASH 25, Data Sheet No. L-364, all production versions and serial numbers. Powered sailplane Data Sheet No. L-858, only production version ASH 25 E, all serial numbers.</li> <li>Prior to the next take-off, if a major repair in the landing gear area or the fin area was done in the past years.</li> <li>On the next mandatory annual C. of A. inspection.</li> <li>Reason:         <ul> <li>Fatigue tests on fiber composite wings and wing spars have demonstrated that a service life expectancy of 12000 hours can be reached for these structural component As these fatigue test programs did not examine the entre aircraft made of fiber com posite, the service life.</li> <li>In the case of two ASH 25 damages to the elevator control linkage have been ove looked after inadequately accomplished repairs in the areas of the landing gear and the fin. These damages due to overstressing the elevator control linkage can lead the fin. These damages due to overstressing the elevator control linkage have been ove looked after inadequately accomplished repairs in the areas of the landing gear and the fin. These damages due to overstressing the elevator control linkage the rearted and the fin. These damages due to overstressing the elevator control linkage the reart landing gear and a trad when being initiated accordingly, lead to a frequency coupling with the horizont stabilizer</li></ul></li>
<ul> <li>applicability: Sailplane ASH 25, Data Sheet No. L-364, all production versions and serial numbers. Powered sailplane Data Sheet No. L-858, <i>only</i> production version ASH 25 E, all serial numbers.</li> <li>Compliance: <ol> <li>Prior to reaching a total flight time of 6000 h.</li> <li>Prior to the next take-off, if a major repair in the landing gear area or the fin area was done in the past years.</li> <li>On the next mandatory annual C. of A. inspection.</li> </ol> </li> <li>Reason: <ol> <li>Fatigue tests on fiber composite wings and wing spars have demonstrated that a service life expectancy of 12000 hours can be reached for these structural component: As these fatigue test programs did not examine the entire aircraft made of fiber composite, the service life of 12000 hours can be granted only if the long-term airworth ness of each individual aircraft is demonstrated in a special multi-stage inspectio program (over and above the mandatory annual C of A inspections) for the purpose of increasing the service life.</li> </ol> </li> <li>In the case of two ASH 25 damages to the elevator control linkage have been ove looked after inadequately accomplished repairs in the areas of the landing gear and of the fin. These damages due to overstressing the elevator frequency caused by this can i turn when being initiated accordingly, lead to a frequency coupling with the horizont stabilizer and thus lead to flutter.</li> <li>The two bolted connections of the landing gear H-strut to the fittings at the rear landing gear bulkhead have come loose in single cases. If these bolted connections are not covered with screw safety varnish, the bolted connection are not covered with screw safety varnish, the bolted connection are not covered with screw safety varnish, the bolted connection are not covered with screw safety varnish was applied and is undamaged, this action is not applicate be as in that case the connection was already secured with Loctite ex factory.</li> </ul>
<ol> <li>Prior to the next take-off, if a major repair in the landing gear area or the fin area was done in the past years.</li> <li>On the next mandatory annual C. of A. inspection.</li> <li>See AD-Note 1993-001/3.</li> <li><b>Reason:</b> <ol> <li>Fatigue tests on fiber composite wings and wing spars have demonstrated that a se vice life expectancy of 12000 hours can be reached for these structural components. As these fatigue test programs did not examine the entire aircraft made of fiber com posite, the service life of 12000 hours can be granted only if the long-term airworth ness of each individual aircraft is demonstrated in a special multi-stage inspectio program (over and above the mandatory annual C of A inspections) for the purpose of increasing the service life.</li> <li>In the case of two ASH 25 damages to the elevator control linkage have been ove looked after inadequately accomplished repairs in the areas of the landing gear and of the fin. These damages due to overstressing the elevator control linkage can lead the reduced control stiffness. The decrease of elevator frequency caused by this can in turn when being initiated accordingly, lead to a frequency coupling with the horizont stabilizer and thus lead to flutter.</li> <li>The two bolted connections of the landing gear H-strut to the fittings at the rear landing gear bulkhead have come loose in single cases. If these bolted connections ar not covered with screw safety varnish, the bolted connection on each side must be undone and a lockplate must be added which must be bent upwards after the retigh ening of the bolted connection. If screw stop safety varnish was applied and is undamaged, this action is not applicable as in that case the connection was already secured with Loctite ex factory.</li> </ol> </li></ol>
<ul> <li>vice life expectancy of 12000 hours can be reached for these structural components. As these fatigue test programs did not examine the entire aircraft made of fiber composite, the service life of 12000 hours can be granted only if the long-term airworth ness of each individual aircraft is demonstrated in a special multi-stage inspection program (over and above the mandatory annual C of A inspections) for the purpose of increasing the service life.</li> <li>2. In the case of two ASH 25 damages to the elevator control linkage have been over looked after inadequately accomplished repairs in the areas of the landing gear and of the fin. These damages due to overstressing the elevator control linkage can lead the fin. These damages due to overstressing the elevator control linkage can lead the fin. These damages due to overstressing the elevator control linkage can lead the fin. These damages due to overstressing the elevator could by this can intur when being initiated accordingly, lead to a frequency coupling with the horizonta stabilizer and thus lead to flutter.</li> <li>3. The two bolted connections of the landing gear H-strut to the fittings at the rear landing gear bulkhead have come loose in single cases. If these bolted connections ar not covered with screw safety varnish, the bolted connection on each side must be undone and a lockplate must be added which must be bent upwards after the retigh ening of the bolted connection. If screw stop safety varnish was applied and is undamaged, this action is not applicately be as in that case the connection was already secured with Loctite ex factory.</li> </ul>
<ul> <li>looked after inadequately accomplished repairs in the areas of the landing gear and of the fin. These damages due to overstressing the elevator control linkage can lead the reduced control stiffness. The decrease of elevator frequency caused by this can inturn when being initiated accordingly, lead to a frequency coupling with the horizonta stabilizer and thus lead to flutter.</li> <li>3. The two bolted connections of the landing gear H-strut to the fittings at the rear landing gear bulkhead have come loose in single cases. If these bolted connections are not covered with screw safety varnish, the bolted connection on each side must be undone and a lockplate must be added which must be bent upwards after the retightening of the bolted connection.</li> <li>If screw stop safety varnish was applied and is undamaged, this action is not applicate ble as in that case the connection was already secured with Loctite ex factory.</li> </ul>
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An annual check of the rudder cable pulley in the fin is no longer necessary. Operatio experience with more than 200 sailplanes of the types ASH 25 and ASW 22 has dem onstrated that this cable pulley is not critical with respect to its service life. The grease intervals for all control surface bearings can also be distinctly extended a they are sufficiently protected from dust or other environmental influence by their elastic sealing tapes on both sides.
4. Because of troubles reported on L'Hotellier quick-release connectors with lockin wedge the LBA arranged for the issue of an AD-Note. By means of this TN the curently valid issue of AD note No. 1993-001/3 becomes now part of the Maintenance Manual. Changes to the Flight Manual which so far had to be done by hand, are nor replaced by inserting new pages with correspondingly changed contents. With respect to the securing procedures mentioned on Sheet 2 of the Annex to the above AD-note only the following apply to Schleicher aircraft: the safety pin Fig. (spring clip), the Schempp-Hirth safety spring Fig. 4 (also called spring clip) or the Wedekind safety sleeve Fig. 5.

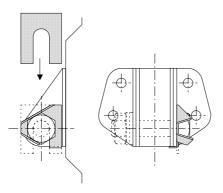
Action:

 Upon reaching a total flight time of 6000 hours the "Inspection Program To Increase The Service Life ASH 25" must be accomplished once again. The latest update of this Program can be ordered from Messrs. SCHLEICHER, or from the SCHLEICHER agency in your country. Contact: Alexander Schleicher GmbH & Co.

## Alexander Schleicher GmbH & Co. P.O.Box 60, D-36161 Poppenhausen Tel +49 6658 890 or Fax +49 6658 8940

A copy of the accomplished and filled in program must be returned to the above address.

- 2. The elevator control linkage must be inspected in accordance with the "Check list to inspect the elevator control linkage ASH 25, all production versions". If damages or insufficient control stiffness are found, the control linkage must be repaired and the "reinforcement for L/G bulkhead, rear" (drawing no. 250.11.0209) must be installed. If the control linkage is undamaged, the installation of the reinforcement bulkhead is not necessarily required at once. But at the latest at a total flight time of 3000 h, the installation becomes compulsory.
- 3. Where necessary, lockplates from Messrs. Schleicher must be fitted according to the following sketch.



The change to the maintenance intervals is detailed on and covered by the exchange of the Maintenance Manual pages. The following pages in the manuals must be exchanged for new pages with the respective revision entry.

ASH 25Revision Entry TN 14:Flight Manual:Pages4.4 - 4.5Maintenance Manual:Pages3.3 - 3.4/4.2 - 4.5These pages include also the changes under TN 5, 6 and 11. If any of these TN's are accomplished subsequently, these pages must not be exchanged again. The pages with the revision entry TN 14 are the latest update inclusive of all TN 5, 6 and 11 revisions!ASH 25 as per TN 1 (with engine compartment) Revision Entry TN 14:Flight Manual:Pages for ASH 254.4 - 4.5

 Maintenance Manual:
 Pages for ASH 25
 3.3 - 3.4
 4.2 - 4.5
 7.3
 7.5 - 7.7
 8.3

 Pages with additional TN 1 Rev. Entry:
 5.2
 7.4.

These pages include also the changes under TN 5, 6 and 11. If any of these TN's are accomplished subsequently, these pages must not be exchanged again. The pages with the revision entry TN 14 are the latest update inclusive of all TN 5, 6 and 11 revisions!

 ASH 25 E
 Revision Entry TN 12:

 Flight Manual:
 Pages 4.4 - 4.5

 Maintenance Manual:
 Pages 3.3 - 3.4
 / 4.2 - 4.4
 / 5.2
 / 7.3 - 7.7
 / 8.3

These pages include also the changes under TN 4 and 10. If any of these TN's are accomplished subsequently, these pages must not be exchanged again. The pages with the revision entry TN 12 are the latest update inclusive of all TN 4 and 10 revisions!

The exchange of the pages in the Manuals must be documented on page "Record of Revisions".

Material & drawings: The lockplates, the Maintenance Manual pages & Maintenance Instructions as well as the "Inspection Program To Increase The Service Life" can be obtained from Messrs. SCHLEICHER or from the SCHLEICHER agency in your country. You always need to state the sailplane type and serial number.
 Mass & C.G.: The change in mass is low and, therefore, the influence on empty mass and C.G. is negligible.
 Notes: 1. The "Inspection To Increase The Service Life" must only be accomplished by the manufacturer or by a technical aviation service station holding an appropriate license.
 2. The part "reinforcement for L/G bulkhead, rear" (drawing no. 250.11.0209) must be obtained from the manufacturer Alexander Schleicher GmbH.

- The installation must be done only by the manufacturer Alexander Schleicher or by a technical aviation service station holding an appropriate license.
- 3. The lockplate can be fitted by a skilled person.

All actions to be checked and entered in the sailplane's log by a licensed aviation inspector who must also certify the accomplishment in the sailplane's inspection documents and in the Flight and Maintenance Manual.

The exchange of the pages in the Manuals can be done by the operator of the sailplane  $\ensuremath{\mathsf{himself}}$ 

Poppenhausen, March 27, 1998

## Alexander Schleicher

GmbH & Co.

By order

(M. Heide)

The German original of this Technical Note has been approved by the LBA under the date of November 06, 1998 (signature: Jung). The translation into English has been done by best knowledge and judgement; in any case of doubt the German original is controlling.