Subject: Improvement of flying characteristics by means of modified flaperon mixer in the outboard wing.

Effectivity: All ASW 22 and ASW 22 M, serial numbers 22 001 thru 22 032 including.

Accomplishment: None; the modification according to this Technical Note is optional.

Reason: During flight performance tests it was noticed that the wing bending deflection is changing depending on flap setting and airspeed. It has been found out that the outboard flaperons are acting too much as flaps. Following this experience the mixer of this control circuit has been modified such that the actuation of the flap lever will result in less control displacement whereas sideways stick actuation will result in greater control displacement. At the same time the aileron control circuit has been modified such that the control deflections have more differential displacement.

Instructions:
1. The upper wing surface must be opened according to the data given on drawing 220.51/52.515 with the Correction Note TM-No. 1 of Oct. 28, 1983.

2. The parts P/N 220.41.0026
   220.41.0027 and
   220.41.0028
must be made according to their drawings and have to be exchanged against the parts
   P/N 220.41.0015
   220.41.0013 and
   220.41.0012.

3. After the installation of the new parts the glider must be rigged and the entire aileron / flap control deflections have to be checked in accordance with the new table on the ASW 22 Maintenance Manual page 37 with the Correction Note TM-No. 1 dated Oct. 28, 1983. Normally only the outer flaperons will need adjustment.

4. The wing sandwich must then be reclosed according to the Repair Manual page 18, figure 3 b, by observing the layer scheme of the upper wing sandwich. Only original material must be used. The postcure procedure of 12 hours at more than 60 °C must be carefully observed.
5. Page 37 of the ASW 22 Maintenance Manual has to be exchanged against the new page 37 with the Correction Note TN-No. 1 dated Oct. 28, 1983; this has to be documented on page 1 of the Maintenance Manual ("Index of corrections").

Material: Use original material only; see ASW 22 layer scheme 220.51/52.52BL2 (upper wing surface).

Weight and balance: The increase of weight owing to this modification is only slight; the influence on the C.G. position can be neglected.

Notes:
1. The modification according to this TN-No. 1 is included into the series production as of s/n 22 033.
2. The work according to this TN-No. 1 must only be done by a licensed repair station or by the manufacturer.
3. The accomplishment of this modification must be documented in the glider's logbook and inspection papers by a licensed inspector.

Drawings:
For this TN-No. 1 the drawing 220.51/52.515 has been corrected by Correction Note TN-No. 1 dated October 28, 1983.
The new drawing 220.41.0026 will replace 220.41.0015, 220.41.0027 = 220.41.0013, and 220.41.0028 = 220.41.0012.

Poppenhausen, October 28, 1983

ALEXANDER SCHLEICHER
Segelflugzeugbau

Gerhard Waibel.

The German original of this Technical Note has been approved by the LBA under the date of November 8, 1983, and has been signed by Mr. Schmaljohann. The translation of this Technical Note has been done by best knowledge and judgement; in any case of doubt, the German original text is authoritative.
<table>
<thead>
<tr>
<th>St.</th>
<th>Benennung</th>
<th>Lfd. Nr.</th>
<th>Werkstoff</th>
<th>Röhrenlänge</th>
<th>Bemerkung</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Standard-U-Block</td>
<td>5</td>
<td>17213.4 od 17734.4</td>
<td>φ12 × 1 - 4.6</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rohr</td>
<td>4</td>
<td>St 35 BK / BKW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Pendelkugellager</td>
<td>3</td>
<td></td>
<td>φ20 × 0.5 - 12</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Nethuchse</td>
<td>2</td>
<td>St 35 BK / BKW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Auge</td>
<td>1</td>
<td>St 35 BK / BKW</td>
<td>φ24 × 3 - 6</td>
<td></td>
</tr>
</tbody>
</table>

Bemerkung: Sollstrang XI für QR-Antrieb

ASW22

Zeichnungsnr. L-351

220 41 00 26

A. Schleicher
Segelflugzeugbau 645 Fliegerhaus

Datum: 12.06.83

Blatt: 1

Zust.: Änderung Datum Nr. Preis

Einz 220 fr 20.10. Ein a
17214 4 od 17734 4 aus Stanzteil hergestellt

<table>
<thead>
<tr>
<th>Datum</th>
<th>Name</th>
<th>Typ</th>
<th>Benennung</th>
<th>Muster</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.08.93</td>
<td>Juw</td>
<td>ASW 22</td>
<td>Lasche II für QR-Antrieb</td>
<td>11</td>
</tr>
</tbody>
</table>

A Schleicher
Segelflugzeugbau
D-8 Poppelshausen

Zeichnungsnummer L-351
220 41 0027

Datum: 17.02.47
Sign.: 1.3
1 Stück spiegelbildlich biegen!

<table>
<thead>
<tr>
<th>St</th>
<th>Benennung</th>
<th>Lfd. Nr.</th>
<th>Werkstoff</th>
<th>Rohmaße</th>
<th>Bemerkung</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rillenkugellager</td>
<td>5</td>
<td></td>
<td>626 A-Z</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>kl Flansch</td>
<td>5</td>
<td></td>
<td>WNT99.304.0001</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Halbrundmutter φ 3 x 13,5</td>
<td>4</td>
<td></td>
<td>DIN660 - A1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Hebel</td>
<td>3</td>
<td></td>
<td>31364 - 5</td>
<td>114 x 72 x 5</td>
</tr>
<tr>
<td>4</td>
<td>Pendelkugellager</td>
<td>2</td>
<td></td>
<td>14 C6</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Nietbuche</td>
<td>1</td>
<td></td>
<td>St 35 BK / BKW</td>
<td>ø 20 x 0,5 - 11</td>
</tr>
</tbody>
</table>

Datum: 08.03.93  Umr: Juhn  Zeichnungsnr: L-351

ASW 22  QR  TM-Nr. 1  1:1

Bei 220.41.0028

A Schleicher  Ziegelstraße 2  688 Poppenshausen

Änderung  3  Um Nr  Umr: Ers 1  220.44.0074  Ers d
<table>
<thead>
<tr>
<th>Datum</th>
<th>Name</th>
<th>Typ</th>
<th>Benennung</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.03.83</td>
<td>Juw</td>
<td>ASW 22</td>
<td>Lasche II für QR-Antrieb</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>A Schleicher</td>
<td>Zeichungsnummer</td>
<td>L 351</td>
<td>220 41 0027</td>
</tr>
</tbody>
</table>

17214 4 od 177344 aus Stanzteil hergestellt

4 Stück

8 H7 + 15
6 H7 + 12
0