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ASK 23 /ASK 23B
Technical Note
No. 9

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Subject: Securing of L'HOTELLIER quick-release connectors (ball and swivel joints) as per Airworthiness Directive (AD) "93-001 L'HOTELLIER" of the German Civil Aviation Authority (LBA) dated March 3, 1993.

Serial number applicability: ASK 23 and ASK 23B, Data Sheet No.L-353. All serial no.s.

Compliance: None; optional as replacement for the safety pin (spring clip similar to standard DIN 11 024) which was recommended by Schleicher until now. See also the AD 93-001.

Reason: The securing of the L'HOTELLIER quick-release connectors by means of safety pins (spring clips) has always proved to be very reliable but in the case of some SCHLEICHER glider types it has been complicated to fit them. Several proposals to improve the situation have become known to us, and the solution developed by Dipl.Ing. Klaus Wedekind has demonstrated to be easy-to-operate and relatively easy to retrofit. According to the LBA the "Wedekind safety sleeve" provides the same security as the safety pins and has been LBA-approved under the date of May 18, 1993.

Action: L'HOTELLIER quick-release connector with thread adjusting head:

The installation of the safety sleeve AS-V is done in accordance with the "Hints for retrofitting" of the general Technical Note "Wedekind-safety sleeve, LBA-approved under the date of May 18, 1993".

However, the following additional notes must be strictly regarded:

Prior to undoing the adjusting head its adjustment length must be measured in order to avoid having to re-adjust the control surfaces or flaps after the re-fitting of the heads!

Contrary to the note to bore the blind rivets by means of a drill dia 3.5 mm we recommend instead to use a drill of dia 4.1 mm.

In order to be able to fit the bushing (2) it may be necessary to file down any excess material at the outside diameter of the adjusting head (e.g. at the seams) to exactly the rod diameter of 16 mm. Adjusting head must again be protected from corrosion!

It may also become necessary for the blind rivet head to ream the bushing (2) slightly at the side.

If the thread of the adjusting head has been painted, it may become necessary to re-cut the thread with a screw die in order to be able to screw the M10x1 nut (8) onto the thread of the adjusting head. After assembly the thread must be again protected from corrosion!

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Further to the note given under point "Hints for retrofiting" on Sheet 3 of the "Wedekind safety sleeve" Technical Note the taping of the thread will not only serve for securing the M10x1 nut (8) but it serves also as protection to prevent a fouling of the adjusting head. Instead of using adhesive tape the nut may also be secured using torquelock Loctite 262 or 638.

L'HOTELLIER quick-release connector rivetted into the Dural pushrod:

The installation of the safety sleeve AS-S is done in accordance with the hints for retrofiting of the general Technical Note "Wedekind-safety sleeve, LBA-approved under the date of May 18, 1993".

However, the following additional notes must be strictly regarded:

Contrary to the note to bore the blind rivets by means of a drill dia 3.5 mm we recommend instead to use a drill of dia 4.1 mm.

If it is very hard to pull the L'HOTELLIER quick-release connector (ball and swivel joint) off the push rod, it is recommended to use a suitable retaining tool for the push rod and for the L'HOTELLIER quick-release connector so that the Dural push rod dia. 16x1mm and the ball socket will not be damaged (e.g. use half-shells for clamping).

Measured from the flange of the L'HOTELLIER quick-release connector, the clearance up to the drill hole dia. 2mm for the spring pin (6) is 31 mm.

In order to drill the hole dia. 2 mm for the spring pin (6) into the bushing (4) and into the push rod, it is best to fix the bushing onto the push rod, e.g. by means of adhesive tape.

Material & drawings:

General Technical Note "Wedekind safety sleeve, LBA-approved under the date of May 18, 1993"; and in case of L'HOTELLIER quick-release connectors with thread adjusting head:

Designation	Part no.	Pieces
Bushing $\phi 20 \times 1,8$, 6 long	2	1
Compression spring I $\phi 17,5 \times 0,9$, 17 long	3	1
Safety sleeve AS-V	5	1
Spring pin DIN 1481 - 2x22	6	1
Washer $\phi 10,5/20 - 1,5$	7	1
Hexagonal nut M10x1 DIN 439	8	1
Blind rivet $\phi 4 \times 6,8$ DIN 7337 A	/	4

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and in case of
L'HOTELLIER quick-release connectors riveted into pushrod:

Designation	Part no.	Pieces
Bushing $\phi 20 \times 1,8$, 6 long	2	1
Compression spring I $\phi 17,5 \times 0,9$, 17 long	3	1
Bushing $\phi 20 \times 1,8$, 7 long	4	1
Safety sleeve AS-S	5	1
Spring pin DIN 1481 - 2x22	6	1
Blind rivet $\phi 4 \times 6,8$ DIN 7337 A	/	4

The material required for this mod can be ordered from Messrs.SCHLEICHER Tel.+49-(0)6658-890 or Fax+49-(0)6658-8940. The customers must state the glider type in question and its serial number.

Weight & Balance: Negligible.

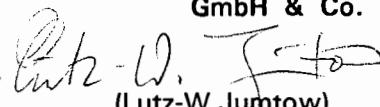
Notes: The green marking of the bushing (4) which is referred to on Sheet 2 of the Technical Note "Wedekind-safety sleeve" is not required.

After the assembly of the "Wedekind safety sleeves" the control surfaces must be checked for full deflection and free movement in the area of the safety-sleeves towards root rib openings, fittings etc.

The Action under this mod can be done by a competent person. The accomplishment of this mod must be certified by a licensed aviation inspector in the glider's inspection documents and in the log-book.

Poppenhausen, August 4, 1993

ALEXANDER SCHLEICHER
GmbH & Co.

i.A. 
(Lutz-W.Juntow)

The German original of this Technical Note has been approved by the LBA under the date of Sept.6, 1993 (signature: SCHMALJOHANN). The translation into English has been done by best knowledge and judgement; in any case of doubt the German original is controlling.

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