## 2.1 Rigging

All pins and fittings including the ball pip fittings are to be cleaned and lubricated. Put the flap lever in position 2 as to avoid that the pushrods running from the wing into the fuselage interfere with the mixer and thereby become bent. Insert right wing (2-prong spar end) from the side into the fuselage tunnel, then left wing from the opposite side. Align the main fittings, push in the main pins and safety. Now the wing tips can be released.

Connect ailerons and dive brakes and double-check the connection by trying to pull the push-pull rods away from the ball fittings.

After cleaning and lightly greasing the plug-in elevator connections, the tailplane is fitted onto the fin from the front. Both elevator panels must be fitted into their connectors simultaneously. The tailplane is now pushed back until the Allan bolt at the leading edge can be screwed in; this should be screwed in tightly until the spring-loaded safety pin snaps out over the screw head as far as the socket.

The taping of the wing-fuselage junction with a plastic tape makes a lot of performance with but small expenditure ( 1-2 points on the L/D ).

The inspection hole cover of the fuselage must also be taped so that its cover plate cannot be sucked off at high sir pressure loads.

Do not tape the canopy gap, otherwise any emergency exit is jeopardized.

It is recommended to wax the taping area prior to taping so that the tape can be removed later on without pulling off the finish.

Usually the wings will be connected to the fuselage in the 15m span version as the trailer is not long enough to carry the long wings. It is, however, allowed to rig the wings in the long span version.

For both versions it is necessary to safety the wingtips or the elongation by the vertical steel pin of  $6mm \ \emptyset$ .

## ASW 20 L - Operations Manual

For operation beyond 6000 flight hours, certain requirements will be established at the proper time.

- 3. The relevant test program is to be obtained from the manufacturer.
- 4. The inspections may only be carried out by the manufacturer, or by a technical aviation company with appropriate authorization.
- 5. The results of the inspection are to be listed in a report, and every measure is to be commented upon. If the inspections are carried out by a technical aviation company, then a copy of the report is to be sent to the manufacturer for assessment.
- 6. The annual inspection required by § 27 (1) of the LuftGerPO (= Aircraft Examination Rules) is not affected by this rule.

Checking and securing the L'Hotellier quick-close connections of the control circuit

## 1. Securing

The experience of the past shows that mostly the connection of the elevator was incorrectly fitted or even worse simply was forgotten. A sticker on the fin serves to remind the pilot of the correct connection; in addition the securing by means of a spring pin is recommended.

To do this on older ASW 20 gliders the check hole must be drilled to 1,2 mm in diameter.

Aileron, flap and airbrake connections in the fuselage can be safetied by the same method.

\*) Not applicable with the automatic elevator connection mod as per T.N. no.29 !

TN no.17

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faces and tolerances in play ( backlash ) of control circuits ( stick, Tolerances in weight and tailheavy static balance of control surpedals or flap lever fixed ).

	Weight Tolerance	lerance	Moment	ent	Permis	Permissible Play	Play
	[kp]   [lbs.]	[lbs.]	[cm kp]	[cmkp]   [in.lbs.]		[mm]   [in.]	[in.]
Rudder	9'8 - 9'8	6,1-7,8	8,6 - 11,0	2,8 -3,6 6,1-7,8 8,6 -11,0 7,45 -9,53 0,8° 4,5 0,18	0,8°	5'4	0,18
inner Aileron	2,2 - 2,6	7'5-8'7	2,8 - 3,5	2,2 - 2,6   4,8 - 5,7   2,8 - 3,5   2,43 - 3,03   1,25°   1,75   0,07	1,25°	1,75	0,07
outer Aileron	0,23-0,29	9'0 - 5'0	0,54 - 0,66	0,23-0,29 0,5-0,6 0,54-0,66 0,47-0,57 1,25° 1,75 0,07	1,25°	1,75	0,07
Flaps	5,1 - 6,5	11,2 -14,3	12,3 -15,7	5,1 - 6,5   11,2 - 14,3   12,3 - 15,7   10,65 - 13,60   1,1°   2,75   0,11	1,10	2,75	0,11
Elevator (one Panel) 0,7 - 0,9   1,54-1,98   1,7 - 2,2   1,48 - 1,91   1,15°   3,0   0,12	6'0 - 2'0	1,54-1,98	1,7 - 2,2	1,48 - 1,91	1,15°	3,0	0,12
Elevator Actuator   0,21-0,27   0,46-0,6   1,0-1,2   0,87-1,04   1,15°   3,0   0,12	0,21-0,27	9'0-95'0	1,0 - 1,2	0.87 - 1.04	1,15°	3,0	0,12

No play is allowed between elevator actuator the elevator panels