

With major repairs on the control surfaces there is always the danger that their weight and tailheavy moment then exceed the limits. This can lead to control surface flutter and we recommend, therefore, to take care from the first that repairs on control surfaces are made as light-weight as possible.

A table showing the permissible weights, the static tailheavy moments, and the permissible play of the control surfaces is provided in the Appendix (p.50). If these limits are exceeded, you should contact the manufacturer.

After repainting on the control surfaces, e.g application of anti-collision or ornamental paintwork, advertisings or competition letters, the tailheavy static moments must be new established in all cases; for the static balance measurement see the drawing in the Appendix (p.49).

After painting jobs we recommend to check carefully that no ventilation or drainage holes have been filled up with filler or paint. In case of doubt new holes must be drilled in a place where water penetration, icing-up, and dirt are unlikely.

The strong pedal springs (5 kp = 11 lb. tension unexpanded; c = 1,5 kp/cm = 8,4 lbs/in) must not be exchanged against weaker ones, because they are required for a sufficient high rudder circuit frequency, in order to prevent flutter. Worn out springs must be replaced by new ones.

Prevention against flutter by checking the sealing of the wing control surface gaps:

- a) Sealing with a plastic-treated fabric tape (TESABAND): the plastic coat on the fabric must not be damaged, discolored or even weather-worn. The tape must not tighten with full control surface deflections (negative). If the fabric tape is recessed into the wing contour, a turbulator (zig-zag or nap tape) must be fixed in addition directly in front of the fabric tape.
- b) Sealing with an elastic lip (steel or plastic respectively): Check that there is a Teflon sealing tape underneath and that it is not damaged. Even with full control surface deflections (negative) a 100 % airtight fit of the steel (or plastic) lip must be guaranteed.

# ASW 20 L OPERATIONS MANUAL

**Maintenance Instruction G:**

Installation of turn point cameras.

**Maintenance Instruction H:**

Adjusting the tow hook after an unintentional release.

(This Maintenance Instruction has already been included into the present Manual Issue.)

**Maintenance Instruction I:**

Adjusting control surfaces if there is a tendency of the aircraft to pull to one side in level flight.

**Maintenance Instruction J, Issue III, dated 24.04.87:**

Covering the control surfaces gap on the wing under and upper sides by an elastic lip seal.