

## Inspection Program to Extend Service Life

### **1. General**

Fatigue tests on CFRP wings and CFRP wing spars have shown that a service life expectancy of 12000 hours can be reached for these components without problems. However, as this fatigue test program did not examine the entire aircraft made of CFRP and GRP, this service life of 12000 hours can be granted only if the long-term airworthiness 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 extending the service life.

### **2. Time Limits**

When the aircraft has reached a service life of 3000, 6000, and 9000 hours respectively, an inspection must be carried out in accordance with a particular inspection program laid down by Messrs. Schleicher, from whom a copy of this program must be obtained. If the results of this inspection are positive in each case, or if any defects discovered have been correctly repaired, the service life of the aircraft is extended after its 9000 hours inspection by another 3000 hours, i.e. to a total of 12000 hours.

For a possible extension of service life beyond 12000 hours, detailed requirements will be established in due course.

### **Inspection Program**

The appropriate inspection program must be obtained from Messrs.Schleicher. The inspections may be carried out only by the manufacturer, or by an appropriately licensed aircraft repairer.

The results of the inspections must be listed in an inspection report in which each item must be annotated with a comprehensive comment, as laid down.

If the inspection is not carried out by the manufacturer, but by a licensed aircraft repairer, a copy of the filled in inspection report **must** be forwarded to Messrs. SCHLEICHER for the purpose of evaluation.

Messrs. SCHLEICHER will issue an acknowledgement of receipt and send it back to the aircraft owner. Only then the inspector must certify the increase of the service life in the logbook and in the aircraft inspection records.

The need for annual Certificate of Airworthiness inspections and overhauls is not affected by this rule (for German registered aircraft § 27 (1) LuftGerPO\* applies).

\*LuftGerPO = Aircraft Examination Rules

### **Checking and securing the L'HOTELLIER quick-release connectors in the control linkages**

#### **1. Securing**

Past experience showed that the quick-release connectors in the control linkages, particularly the one at the elevator, were incorrectly assembled or their assembly was even completely forgotten. A sticker fixed to the fin serves to remind the pilot of the correct assembly. In addition all quick-release connectors **must** be secured by means of safety pins, spring clips etc.. With the older type of connectors their check hole must be drilled to approx. 1.2 mm dia. for this purpose. The aileron, flap and airbrake connectors in the fuselage must be secured analogously.

**Maintenance Instruction G:**  
Installation of turn point camera(s).

**Maintenance Instruction H:**  
How to adjust the tow release coupling in case of unintentional release. This Maintenance Instruction has already been included with this manual amendment.

**Maintenance Instruction I:**  
Adjusting control surfaces if the glider has a tendency to turn off from level flight.

**Maintenance Instruction J Issue III** dated 24.04.87:  
describes how to apply an elastic lip seal (plastic fairing strips) to the control surface gaps on the wing upper and under sides.

**Repair Instruction K** dated 18.05.84:  
Assembly instructions for the elevator actuator bearing fitting.

**Maintenance Instruction L** dated 26.01.90:  
Exchange of the fourth elevator push rod in the fuselage.

The general "Maintenance Instruction ALL FRP GLIDER MODELS", dated June 19, 1986 describes the removing of play between the sockets (= bushings) and bolts (= pins) of the wing-to-fuselage transition.

The general "Maintenance Instruction PAINT CRACKS" dated June 26, 1989, describes how to inspect, preserve, and repair the paint surface.

**Amendments to:**

Page 38, para 2.6 "Overhaul" and

Page 40 i, para 4. "Notes for the annual C. of A. Inspection"

**Annual check** must be done on rudder cables, S-shape cable guide tubes, towing hook release cable, and on all Bowden cables.

Particular attention must be paid to those areas of the control cables which with the normal pedal movements are bent at the ends of the S-shape cable guide tubes, and to the visible towing hook release cable ends.

Watch particularly for hand sweat and corrosion inside the Bowden cable sleeve (regard the FAA Advisory Circular AC 43-13.1A § 198, see LBA-Circular No. 10-02/89-1 dated 21.08.89!).

**NOTE:** Check the rudder cables inside the area of the steel tube 'S' by moving the pedals back into the rearmost position and then undoing the cables at their front mounting.

Rudder control cables and towing hook release cable must be replaced after each **3000 operating hours** respectively!