
Subject: Extension of service life

Concerned: G 109/G 109B all S/N's

Urgency:
1. Before reaching a service time of 3000 flight hours: actions 1, 2, 3 (action 3 not at G 109B as of S/N 6500)
2. Before reaching a service time of 6000, 7000, 8000, 9000, 10000, 11000 flight hours: action 1
3. Before reaching a service time of 9500, 10500, 11500 flight hours: action 4

Procedure: Performed fatigue tests have shown that it is now possible to extend the service life to a maximum of 12000 flight hours.
During testing a good fatigue behavior of the composite components was demonstrated.
Nevertheless it is necessary to replace some metal parts.

Actions: The airworthiness has to be demonstrated for each motorglider according to an established inspection schedule:

1. Inspection according to Inspection Record "Extension of Life Time" G 109 /G 109B.
2. Installation of an inspection hole with a sight glass in the lower wing shell in accordance with Repair Instructions No. 817-29/1.
3. Replacement of both spar spigot assemblies in accordance with Repair Instructions No. 817-28/2.

The modification is based on the following drawings:

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<th>Drawing No.</th>
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<tr>
<td>109-1909/1910</td>
<td>13.05.91</td>
<td>Spar Stub LH/RH</td>
</tr>
<tr>
<td>109B-1015/1016</td>
<td>28.09.89</td>
<td>Spar Stub LH/RH</td>
</tr>
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4. The following inspections (visual inspection, tapping) must be performed:

a. wing root external:
   - wing/ fuselage attachment fittings secure in laminate
   - wing connecting bolts: wear, corrosion, deformation

b. spar stub:
   - main spar spigot
   - spar pin fitting tight in laminate

5. The modification will be included in the Maintenance Manual a.s.a.p. at the next revision.

Material: The material (incl. Repair Instructions and Inspection Record) can be obtained from the manufacturer on inquiry.

Weight and balance: Empty weight and the center of gravity have to be checked after execution of the actions.

Remarks:
1. The Modification Information No. 817-6278 is cancelled by this Service Bulletin.

2. The execution of the actions must be carried out by an authorized aviation workshop and has to be certified in the log book by an authorized inspector.

3. After inspection the completed Inspection Record (action 1) must be filed in the airplane logbook, and a copy sent to GROB for evaluation.

4. If you have sold your motorglider in the meantime, we would ask that you kindly pass this information directly to the new owner and forward his address and aircraft s/n to us.

Mattsies 25 November 1991

LBA approved
The German original of this Service Bulletin has been approved by the LBA on the 30. MRZ. 1992 and is signed by Mr. U. Kopp. The translation has been accomplished to our best knowledge and judgement. In case of doubt, the German original is authoritative.

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