Aircraft Inspection

Mandatory

Number:	Issue:
BGA 054/04/2013	1

Subject: Structural inspection

Applicability: BGA Lunak LF107 for reinstatement of Aerobatic Limitations

Accomplishment: Before next aerobatic flight, each annual and 100 hours or 5 years repeat

Reason: To assess and maintain the structural integrity for aerobatic flight in accordance with BGA revised flight envelope.

Instructions: Initial Assessment, before next aerobatic flight: actions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 & 12
Annual inspection: actions 1, 3, 4, 5, 6, 7, 8, 10 & 11
Every 100 flight hours or 5 years: actions 2 & 9

Actions:

1. Annual inspection in accordance with BGA GMP/2005 issue 1 revision 2
2. BGA wooden aircraft inspection ref BGA 047/02/2006 (inspection to be complied with even if Kaurite glue is not used). 5 year repeat inspection.
3. With paint removed from external fittings, using a x10 magnifying glass or other suitable inspection equipment; visually inspect wing root fittings (both wing and fuselage) for cracking, distortion, fretting, elongation of holes, other wear and corrosion. See notes 1,2 & 3.
4. Visually inspect the wing fittings and carry through internal structure for any signs of corrosion which could indicate further corrosion hidden within the wing or fuselage internal structure and any other signs of deterioration, cracks, wear or distortion. Any signs of corrosion or other defects must be investigated before flight. See notes 1,2 & 3.

Issued by - The British Gliding Association Ltd, 8 Merus Court, Meridian Business Park, Leicester. LE19 1RJ.
Note: Mandatory inspections must be recorded in the aircraft log book, unless specified, and certified by an appropriately rated BGA inspector.
Optional inspections should be entered into the D.I. book or log book as appropriate. Optional inspections may be certified by a BGA Pilot.
Alternative methods of compliance will be considered providing an equal level of safety is accomplished. Contact BGA for authorisation.

5. Inspect wing attachment pins looking for signs of corrosion, wear or distortion. Refer to AMM for limits.

6. With paint removed from external fittings, using a x10 magnifying glass or other suitable inspection equipment; visually inspect tail plane attachment fittings (both tail plane and fuselage) for cracking, distortion, fretting, elongation of holes, other wear and corrosion. See notes 1,2 & 3.

7. Visually inspect the tail plane fittings at the entrance to the fuselage and tail plane for any signs of corrosion which could indicate further corrosion hidden within the tail plane or fuselage internal structure and any other signs of deterioration, cracks, wear or distortion. Any signs of corrosion or other defects must be investigated before flight. See notes 1,2 & 3.

8. Inspect tail plane attachment pins looking for signs of corrosion, wear or distortion. Refer to AMM for limits.

9. Carry out non-destructive testing, Dye Penetrant inspection using fluorescent-penetrant method in accordance with ASTM 1417 (latest issue) Type 1, Fluorescent dye, method C (solvent removable) sensitivity level 3 of;

   Both wings ï wing and fuselage fittings and lugs and wing drag fittings and lugs.
   Tail plane ï tail plane and fuselage fittings and lugs

   This inspection requires a PCN level 2 authorised inspector.
   Repeat inspection at 100 flight hours or 5 year whichever occurs first. See note 4.

10. Remove panels covering the wing root fitting attachment bolts on both top and bottom wing surfaces. Check to confirm no signs of movement indicated by cracks in the paint or other indications.

11. Visually inspect the aileron, flap, elevator and rudder hinges for wear, cracking, corrosion or distortion.

12. Forward general condition report, results of initial inspection and NDT results to CTO for Technical Committee assessment and approval to reinstate aerobatic flight.

Note 1:
To aid inspection and if corrosion is suspected colour contrast dye penetrant (red dye) crack detection may be used. Ref CAP 562 CAAIP Leaflet F-20.
Note 2:

Unpainted wing and tail plane fittings should be re-protected by repainting or by application of corrosion inhibitor annually (ACF50, LPS3 or similar product) DO NOT use grease to protect fittings.

Note 3:
All inspections to be recorded on worksheets and glider log book and certified by a BGA inspector.
Note 4:
NDT PCN Level 2 authorised person is required to certify the inspection. BGA inspector authorisation does not cover this certification.

The above inspections are derived from design report no AAS 2216 issue 2 dated 27 March 2013 to allow reinstatement of aerobatic flight and continued airworthiness and is approved by the BGA Technical Committee.

Issued By
Jim Hammerton, Chief Technical Officer