British Gliding Association – Technical Committee

Technical News Sheet 02/05

Part 1 Airworthiness issues (all categories)

1.1 **DG 500 MB Starter ring gear** (Information)
Reported by David Strange from "The Park"
Cracks found in Solo engine starter ring gear from lightening holes to bolt holes.
Manufacturer has been advised.

Glasflugal 201 Libelle BGA 044/02/2005 issue 1 (Mandatory)
Inspection of rudder gimball fork.
Inspection applicable to early type gimball fork only. See BGA Inspection for details of how to identify type.
For details see BGA inspections

1.2 **Schleicher K series inspections** (Information)
Ref BGA Inspection 042/07/2004 issue 2.
We are in the process of collating the information received from your inspection reports. If there are any reports to submit we would be grateful if they could be forwarded to the BGA for the attention of the CTO as soon as possible.
Thank you.

1.3 **SZD 9-bis Bocian** BE-020/80 – 2004 (Information)
The 3000-hour inspection schedule and list of required/recommended replacements has now been published. Inspectors wishing to carry our this inspection should contact the CTO as it has been agreed that only nominated inspectors approved by the BGA may carry out the 3000 hour overhaul.

Engines

1.4 **Limbach 1700, 2000, 2400** TB 27 (Information)
On engine installations where the engine is not level it is possible to over/under fill the oil sump. Too high could result in excessive oil turbulence with loss of power or oil leaks or if too low, oil starvation and overheating. See Limbach TB 27 for calibration of the dipstick.
For details see links to Limbach web site.

1.5 **Rotax 912, 914 series** AD A-2004-004R1 (Mandatory)
Replacement of coolant / reduction of cylinder head temperature limits
For details see links to Astrocontrol web site

Equipment

1.6 **Tost release units used in BGA Gliders** (Mandatory)
AD 1989-018/3, TN 1-2001
The "On Condition" TBO for Tost release units used in any BGA glider has now been withdrawn with effect from 30 April 2005. At the next C of A/annual inspection after the effective date the release units must comply the TBO as specified in the AD.

The TBO specified is 10,000 actuations and Tost have calculated 5 actuations per launch. This may be adjusted for local practices. As a general guide for BGA operations you may use the following ratios.

Club Gliders – 4 to 5 actuations per flight = 2000 to 2500 launches
Private gliders – 3 to 4 actuations per flight = 2500 to 3000 launches

Release units are still subject to normal maintenance & inspections for wear, condition, cleanness & lubrication.

1.7 **Lifed items of equipment** (Information)

Unless an Airworthiness Directive mandates otherwise, Equipment such as seat harnesses used in BGA gliders may be assessed as "On Condition" rather that a mandatory calendar life replacement regardless of condition.
Seat harnesses should be inspected in accordance with AMP leaflet 4-8.

This concession does not apply to pressure vessels such as oxygen cylinders or survival equipment where the stated overhaul and test periods must be observed.

Part 2 Modifications

2.1 **Glider Instrument Panels**

The Technical Committee have decided that the time for compliance element on the recently issued instrument panel guidelines should be removed. Compliance should now be considered at the owners request and when designing or replacing the instrument panel.
Version 2 attached.

2.2 **Modifications general**

All modifications to BGA gliders must be approved by either a BGA inspector or CTO/Technical Committee. Please see AMP leaflet 3-3 for guidelines.

Part 3 General Matters

3.1 **LAMS Maintenance Schedule – Edition - 4, revision – initial issue.**

The LAMS has been updated to edition 4. All owners should receive a copy free of charge and this should replace the edition 3 with the aircraft logbooks. Unfortunately the CAA decided to change the edition number rather than the more usual procedure of a revision. As part of the annual inspection you will need to now check the edition number.
The BGA have voiced our dissatisfaction on your behalf!

The LAMS Schedule and CAP 543 Time Limited Tasks and Component Record are now available on the CAA web site as free downloads.
The BGA can provide limited copies of the LAMS work sheets (section 8) and CAP 543 in A4 format on request.

3.2 **Recording of Airworthiness Directives**

For all aircraft operated under the control of the BGA (gliders, SSS, SLMG and Tugs) it is a mandatory requirement to record compliance with any applicable AD's.

For gliders and SSS, the signature on the 267 “Mandatory Mods & Inspections” implies this and the AD’s etc must be recorded in the front of the logbook and on the certification entry in the main section with the maintenance entry.

For SLMG’s and Tugs, the signature on the BGA 202 implies this and the AD’s must be recorded in the pink pages and certified in the main section with the maintenance entry.

3.3 **Withdrawal of “A” conditions**

With effect from 1 June 2005 the Certificate of Fitness for Flight under “A” conditions may not be used. If you need to fly a “G” reg aircraft whilst the C of A has expired (C of A flight test or positioning) you will need a EASA Permit to Fly. The BGA is seeking a process where we may apply for this otherwise it will mean applying to your local CAA regional office. See Airworthiness notice 9 for details and the issue of a Flight Release Certificate.

3.4 **Importing a Glider from Europe**

The BGA have produced a short guidance note to assist prospective purchasers if they are considering buying a glider from Europe.
See attached.

Compliance Statement:
All mandatory inspections and modifications have been included up to the following:
Airworthiness Notices, Contents issue: 135
CAA CAP 747 Mandatory Requirements for Aircraft, issue: 2 amendment: 1/2005
State of Design Airworthiness Directives review date: 17 February 2005

For reference:
Mandatory Aircraft Modifications & Inspections Summary, issue 287 Final issue – continued in CAP 747
FAA Summary of Airworthiness Directives. Bi-weekly listing 2005-03
Foreign Airworthiness Directives Vol. I and II – CAA Additional Airworthiness Directives, Cancelled
Foreign Airworthiness Directives Vol III, issue 372 Final issue – continued in CAP 747
CAA Mandatory Permit Directives, issue 2004/2

Jim Hammerton
Chief Technical Officer

British Gliding Association

Applicability and modification guidelines for glider instrument panels – version 2

Replacement of metal instrument panels with GRP or wood

Applicability
All gliders that have metal instrument panels that are not boxed in.

Classification
Strongly recommended.

Compliance
At owners request and when designing a replacement panel.

Reason
Sheet aluminium instrument panels were common original equipment on most wooden gliders and early glass gliders such as the Std Cirrus. They have often caused minor injuries during heavy landings, and have caused broken legs in accidents. A sheet metal panel with padding around the bottom is only a slight improvement on a sharp metal edge. GRP (Glass Reinforced Plastic) panels, like those supplied with the ASW19/20 and subsequent Schleicher gliders, tear out of their mounts and break up in a big accident. Thus saving the pilot from serious injury.

Action
Where a metal panel is part of a box, such as the LS or Grob pedestal panels there is no need for action. Where a panel consists of a metal sheet and its bottom edge is exposed, or only slightly protected, it is strongly recommended that it is replaced with a panel made by one of the following methods: -

1. Six layers of 92125-glass cloth/epoxy laminate with a flange all around at least 20mm deep. The flange stiffens the panel and gives good leg protection. Do not reinforce the panel at its mounting points as it is designed to tear out in an accident. Large heavy instruments may require rear support.

2. 6mm thick good quality plywood covered on both sides with one 92110-glass cloth/epoxy layer. This is suitable for small panels where only a few instruments are fitted.

Do not use carbon or Kevlar. Carbon leaves sharp spikes when broken, Kevlar is too strong.

Certification
Panels made up as described here, where a BGA inspector approves the manufacture and fitting, do not need individual mod approval. The work must be written up in the glider logbook. See AMP Leaflet 3-3 for guidelines.

Further information is available from Tim Macfadyen
tim@macfadyenhome.freeserve.co.uk

General advice on buying a new or used glider from Europe.

Before deciding on what type of glider to buy, first check the model is type approved for the issue of an EASA C of A.
Look in CAA publication CAP 747 available do download from the CAA web site;
http://www.caa.co.uk/docs/33/CAP747.PDF
Also check the EASA web site for new additions;
http://www.easa.eu.int/doc/Certification/Design_Appro/easa_tc.pdf
If the aircraft type is not type approved you will not normally be able to get a C of A or operate the glider until the type certification is completed.

It strongly recommended that you get a BGA inspector to survey the aircraft prior to purchase. This is especially important for used aircraft.

Documents that will be required;

For New gliders;
Export C of A or EASA form 52 issued within the previous 60 days.
Certificate of Non-registration issued by the manufacturing country competent authority.
Factory weighing report
Factory flight test
Equipment list
Equipment release documents

For Used gliders;
Export C of A or EU Domestic C of A issued or renewed within the past 60 days.
Certificate of De-registration issued by the last state of registry.

For All gliders;
The maintenance history including previous log books
Details of any modifications.
Details of accidents and repairs.
Flight manual – English version and up to date
Maintenance and repair manuals for airframe (and engine) – recommended

On return the UK:

New gliders will require an acceptance check to bring on to BGA Glider maintenance schedule
The factory flight test and weighing are acceptable for new aircraft provided the equipment fit is accurately reflected.

Used gliders will require a C of A inspection. (BGA 267, 267T)
Re-weigh
Self sustainers – Flight test. (BGA 269)

All gliders will be issued with a BGA C of A initially and 30 day tickets may be used.

Eventually “new” gliders will be issued with an EASA C of A issued by the CAA and will require CAA registration and markings. Owners of effected gliders will be informed in due course. 30 day tickets may not be used with “G” registered gliders.

If the instrument panel installation is changed or altered, modification approval will be required before an EASA C of A can be issued. It is recommended that only released primary instruments are used and all details must be kept to enable the modification application to be applied for when required.

It is strongly recommended for safety reasons, that Imperial flight instruments are fitted (Feet/Mb, Kts) see the Flight Manual for details of approved instruments.