

British Gliding Association – Technical Committee

Technical News Sheet 08/02

Part 1 Airworthiness issues (all categories)

General Note: Where possible a serial number range will be included in each entry of the TNS. If no serial number is quoted then reference must be made to the applicable document to ascertain applicability.

- 1.1 **Centrair 201** SB201-06 (Mandatory)
S/no; 201.002 to 201B072 (and all replacement Tailplanes with serial no. >B0079)
Delamination inspection of Tailplane
Details enclosed and sent to owners.
- 1.2 **Grob G102 Astir** MSB306-36/3 (Mandatory)
G102 Club Astir III S/no 5501 > 5652 (suffix "C")
G102 Club Astir IIIb S/no 5501 > 5652 (suffix "Cb")
G102 Standard Astir III S/no 5502 > 5652 (suffix "S")
Increase mass balance of flying controls. Compliance terminates Vne restrictions imposed by MSB306-36/2.
- 1.3 **Grob G103C Twin III SL** AD1996-206/3 (Mandatory)
S/no ALL
Inspection and improvement of the propeller bearing.
AD details enclosed
- 1.4 **Schempp-Hirth Ventus2cM** AD2002-199, TN825-31 (Mandatory)
S/no 44, 46 > 120 (Solo Engine type 2625-01))
Propeller hub and spindle overload safety device modification.
AD details enclosed
- 1.5 **Schempp-Hirth Discus bM** AD2002-199, TN863-7 (Mandatory)
S/no 1 > 9
Propeller hub and spindle overload safety device modification.
AD details enclosed
- 1.6 **Schempp-Hirth Nimbus 4DM** AD2002-199, TN868-5 (Mandatory)
S/no 1, 3 > 8, 10 >19, 21 > 48
Propeller hub and spindle overload safety device modification.
AD details enclosed
- 1.7 **Schleicher ASK13** (Information)
Main landing gear rubber "Donuts" split and displaced. Operation of flying controls restricted. Inspection recommended after "heavier than normal" landings. Seat pan removal required.
Reported by Paul Gentil, Cotswold GC.
- 1.8 **Glue used in Older wooden gliders (Including Schleicher)** (Information)

Glue failures continue to be reported. Kaurit WHK glue (pink in colour) appears to be the problem. Please see letter from Schleicher's giving advice on rectification action.

Engines

- 1.9 **Rotax Engines** SI-18-1997 (Mandatory)
BGA additional recommendations (Recommended)
 If you are mainly using 100LL Avgas fuel the BGA recommend that you change the engine oil at 25-hour intervals due to lead contamination of the oil and subsequent engine problems. (30% or more Avgas usage is considered "mainly on Avgas") SI-18-1997 states that the oil should be changed at least every 50 hours if using leaded Avgas and also details recommended lubricants.
- 1.10 **Rotax 912A Series** SB-912-034 (Mandatory)
 S/no 3,792.55 > 3,792.943
 Oil pump spares supplied 31/10/01 > 22/3/02
 Inspection of Oil pump attachment screw
- 1.11 **Rotax 912 series** SB-912-035 (Mandatory)
 912A S/no 4,410.472 > 4,410.533
 912F S/no 4,412.817 > 4,412.824
 912S S/no 4,922.768 > 4,922.866
 Inspection or replacement of rocker arms and valve push rods.
 Contact Skydrive for warranty details.
- 1.12 **Rotax 194F** SB-914-021 (Mandatory)
 914F S/no 4,420.314 > 4,420.355
 Inspection or replacement of rocker arms and valve push rods.
 Contact Skydrive for warranty details.

Equipment

- 1.13 **Ottfur OM Series release units (Pre 1977)** (Recommended)
 Inspection guidelines issue 2, containing additional information and corrections, published by Cair Aviation for release units fitted to older and vintage gliders.
 Details enclosed.

Part 2 Modifications

None

Part 3 General Matters

- 3.1 **Airworthiness Notice 35 for Motor Gliders**
 The CAA has agreed to allow applications to vary the requirement for a Motor Glider engine to have at least 200 hours to run before the TBO on import or first UK registration. Each application will be treated on an individual basis, but if the engine is in good condition and has been properly serviced, all mandatory inspections and

modifications completed their should be no problem. Contact Propulsion Department at CAA, Aviation House, Gatwick. Quote CAA Ref. 9/80/G/102/35.

3.2 Correct use of 'Dynafoam' energy absorbing seat cushions

Due to recent incidents where pilots have received concussion as a result of incorrect use of energy absorbing cushions the following recommendations have been made by Dr. Tony Segal;

- 1) For low profile gliders, with a semi-reclining seating position, use a ½ inch thick Dynafoam cushion. This will be flexible enough to fit the double curvature of the seat pan.
- 2) For upright seating position training gliders use a 1 inch thick Dynafoam cushion
- 3) For some types of Motor Glider there may be sufficient headroom under the canopy to use a 2 inch thick Dynafoam cushion
- 4) A very tall pilot, or one with a large sitting height (the distance from the buttocks to the top of the head), may have to remove the seat cushion and sit on the seat pan itself.

The golden rule is; use suitable energy absorbing cushions but not at the expense of hitting the pilot's head on the canopy or structure. Allow an absolute minimum clearance of 2 inches between the pilot's head and the canopy. Any less and there is a risk of the pilot's head contacting in the event of a winch launch, turbulence or rough landing. For a full copy of Dr. Tony Segal's article see S & G planned for Oct/Nov issue.

3.3 Repairs to composite structures

With the introduction of advanced composite structures on gliders some careful thought has to be given to repairs and some of the old practices are no longer applicable.

When repairing advanced composite structures including Glass Fibre, Carbon Fibre, Kevlar etc. Always follow the manufacturers repair instructions as the particular structure may require specialist skills or equipment such as autoclaves or vacuum equipment. **Some structures cannot be repaired and have to be replaced if damaged.** Carrying out non approved repairs to advanced composite structures could effect the structural integrity of the aircraft.

Compliance Statement:

All mandatory inspections and modifications have been included up to the following;

Airworthiness Notices, Contents issue 130

Mandatory Aircraft Modifications & Inspections Summary, issue 262

FAA Summary of Airworthiness Directives. Bi-weekly listing 2002-17

Foreign Airworthiness Directives Vol. I and II – CAA Additional Airworthiness Directives, issue 337

Foreign Airworthiness Directives, issue 347

CAA Mandatory Permit Directives, issue 2002/3

Jim Hammerton
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