BGA SDMP 267 form (only for use in the BGA airworthiness system)

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| **Part-M and ML Aircraft Maintenance Programme (AMP)** | | | | | | | | |
| **Aircraft identification** | | | | | | | | |
| 1 | Registration: | | Type: **Grob G102 Astir CS** | | Serial no: | | | |
| **Basis for the maintenance programme** | | | | | | | | |
| 2 | **Below is the BGA recommended option for all Sailplanes,** | | | | | | |  |
| **Design approval holder (DAH) maintenance data** | | | | | | | | |
| 3 | **Equipment manufacturer and type** | | | **Applicable maintenance data reference (at latest revision)** | | | | |
| 3a | Aircraft | **Grob Flugzeugbau GMBH & Co KG** | | Grob G102 Astir CS Up to date Maintenance Manual | | | | |
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|  |  |  | |  | | | | |
| **Additional maintenance requirements not covered above (applicable to all AMPs, regardless of whether they are based on design approval holder (DAH) data or minimum inspection programmes (MIPs))** | | | | | | | | |
| 4 | **Indicate if any of the following additional maintenance requirements are applicable (when replying ‘YES’, list the specific requirements in Appendix B (add to the BGA SDMP 267 EASA mandatory and BGA CAMO requirements found after task 56) to this AMP** | | | | | Yes | No | |
| Maintenance due to specific equipment and modifications | | | | |  | No | |
| Maintenance due to life-limited components | | | | | Yes |  | |
| Maintenance due to mandatory continuing-airworthiness information (airworthiness limitations (ALIs), certification maintenance requirements (CMRs), specific requirements in the TCDS, etc.) | | | | | Yes |  | |
| Maintenance due to repetitive ADs | | | | | Yes |  | |
| Maintenance due to specific operational/airspace directives/requirements (altimeter, compass, transponder, etc.) | | | | |  | No | |
| Maintenance due to type of operation or operational approvals | | | | |  | No | |
| 5 | **Indicate if there is any maintenance due to specific recommendations in service bulletins, service letters, etc. (when replying ‘YES’, list the specific recommendations and any deviations in Appendix B to this AMP)** | | | | |  | No | |
|  | | | | | | | | |
| **Approval/declaration of the maintenance programme by owner** | | | | | | | | |
| 7 | **Declaration by owner**  ***‘I hereby declare that this is the maintenance programme applicable to the aircraft referred to in Field 3, and I am fully responsible for its content and, in particular, for any deviations from the Design Approval Holder’s recommendations.’***  Signature/name/date: | | | | | |  | |
| **Certification statement** | | | | | | | | |
| 8 | ***‘I will ensure that the aircraft is maintained in accordance with this maintenance programme and that the maintenance programme will be reviewed and updated as required.’***  Signed by the person/organisation responsible for the continuing airworthiness of the aircraft according to ML.A.201:  Owner  — Lessee  Name of owner/lessee  Address:  Telephone:  Email:  Signature/date: | | | | | | | |
| 9 | Appendices attached to BGA SDMP 267   * Appendix A NO BGA SDMP 267 already complies with Appendix A requirement * Appendix B YES  NO  Add to the BGA SDMP 267 EASA mandatory and BGA CAMO requirements after task 56 | | | | | | | |
|  | **Record of periodic reviews and revisions of the Aircraft Maintenance Programme (in accordance with M.A.302(g) or M.A.302(h)5, as applicable) (add more rows/lines if required)** | | | | | | | |
| 10 | |  |  | | --- | --- | | **Entire below changes to this SDMP and revision number** | **Date and signature of owner** | | Version 1 |  | |  |  | |  |  | |  |  | | | | | | | | |

BGA Self-Declared Minimum Inspection Program

form 267 configured for Grob 102astir CS sailplanes

Tim Macfadyen 31 March 2019

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| Work pack file ref: |
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| Registration G- | BGA No. | Type. Grob 102 Astir CS | Serial No |

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| Task  Item | Description | Inspection detail | Operation  Insp/check |
| **If a task is not applicable delete row/line or write N/A as required.** | | | |
| 0 | **All Tasks General** | The aircraft must be thoroughly cleaned. Inspect for security, damage, wear, integrity, drain/vent holes clear, signs of overheating, leaks & chafing. Whilst checking GRP Composite structures check for signs of impact or pressure damage that may indicate underlying damage.  The manufacturer’s maintenance manual must be used for specific maintenance instructions. |  |
| 1 | **Fuselage Paint/Gelcoat** | Inspect external surface, gel coat and paintwork. Check that registrations marks are correctly applied. All turbulator tapes are fitted correctly and secure. |  |
| 2 | **Fuselage structure** | Check frames, formers, skin and attachments. Inspect for signs if corrosion on steel framework. Check all the cast aluminium frames very carefully as they are often damaged by heavy landings or ground loops. Especially check the frame that is hidden under the tray below the wing spars. |  |
| 3 | **Nose Fairing** | Inspect for evidence of impact with ground or objects. |  |
| 4 | **Rudder** | Check rudder assembly, hinges, attachments, balance weights. |  |
| 5 | **Ventilator** | Check operation of ventilator and canopy demisting |  |
| 6 | **Wing attachments** | Inspect the wing structural attachments. Check for damage, wear and security. Check for rigging damage. Check condition and security of wing attachment devices as per the mandatory EASA inspection at the end of this document. |  |
| 7 | **Canopy, locks, jettison** | Inspect canopy frame and transparency for cracks unacceptable distortion and discoloration. Check operation of all locks and catches.  Carry out an operational test of the canopy jettison system.  Canopy jam during jettison inspection ref BGA Inspection 021/10/2001 |  |
| 8 | **Seat / cockpit floor** | Inspect seat. Check that all cushions are correctly installed and secured and are made from energy absorbing foam. Seat trim inspection ref BGA Inspection 019/10/2001. Check that all pipes and wires under the seat/floor are secure and can’t be pinched/fretted between the seat/floor and fuselage. |  |
| 9 | **Cleanliness / loose article check** | Clean all debris and foreign items from under the cockpit floor/ seat pan and the rear fuselage. |  |
| 10 | **Mainwheel, tyre & brake assembly** | Remove brake drum, check brake lining wear. Check drum wear.  If brake operates intermittently as the wheel is turned, the drum is distorted and needs skimming.  There should be minimal play in the brake operating arm. Check brake adjustment.  Check tyre for wear, sidewall damage, perishing, pressure and that creep marks have not moved.  Tyre pressure, 36 psi, should be marked near wheel.  **CAUTION: VERY OLD BRAKE SHOES MAY CONTAIN ASBESTOS.** |  |
|  |
| 11 | **Undercarriage** | Thoroughly clean all parts. Check all links and their mountings for signs of damage and corrosion.  Note: Carry out with weight off the landing gear. |  |
| 12 | **Undercarriage retraction system** | Check retraction mechanism and controls with aircraft on jacks/dolly, check warning system if fitted, doors and springs, over centre locking. Perform retraction test. |  |
| 13 | **Tail skid / wheel** | Inspect for evidence of hard/heavy landings. Check skid wear. Inspect wheel, tyre and wheel box. Check tyre pressure. Tyre pressure, 36 psi, should be marked near wheel. |  |
| 14 | **Release hooks** | Inspect & lubricate hooks and controls. Carry out operational test of hooks.  For TBO see “Deviations from TCDS” section at the end of this SDMP.  Next nose hook overhaul due Next winch hook overhaul due |  |
| 15 | **Harnesses** | Inspect harnesses for condition and wear of all fastenings, webbing and fittings. Check operation of release and adjustment. See BGA AMP manual Leaflet 4-8 for advice. |  |
| 16 | **Rudder pedal assemblies & cables** | Inspect & lubricate the pedal assembly and adjustment mechanism. Check cables carefully, especially at the “S” tubes. Slacken and pull the cables out of the tubes to inspect them. Replace both cables if any strands are broken or significantly warn. |  |
| 17 | **Rudder & stops** | Inspect rudder. Check that control stops (in fuselage centre section) are contacting and secure. Check that rudder assembly, hinges, attachments and balance weights are secure. |  |
| 18 | **Elevator, control circuit & stops** | With the tailplane derigged, check tailplane attachments. Inspect elevator connector mechanism. Check that control stops are contacting and secure. |  |
| 19 | **Aileron control circuit & stops** | Inspect the aileron control circuit. Check that control stops are contacting and secure. |  |
| 20 | **Trimmer control circuit** | Inspect all trimmer control circuit components. Check that trimmer does not slip when trimmed fully forward with the stick fully back and visa versa. Rectify as necessary. |  |
| 21 | **Air brake control circuit** | Inspect air brake control circuit, including the position and security of the stop. |  |
| 22 | **Wheel brake control circuit** | Inspect the wheel brake operating cable. If combined with air brake, ensure correct rigging relationship i.e. that the wheel brake does not prevent full airbrake being achieved. |  |
| 23 | **Instrument panel assemblies** | Inspect instrument panel and all instruments/equipment. Check that instrument readings are consistent with ambient conditions. Check correct marking of all switches, circuit breakers and fuses.  Check operation of all installed equipment as far as possible i.a.w. Manufacturer’s instructions. |  |
| 24 | **Pitot/static system** | Inspect pitot & TE probes, static ports and all accessible tubing for security, damage, cleanliness, kinking and condition. Drain water from condensate drains. Perform leak checks on all systems. |  |
| 25 | **ASI operational check** | Carry out operational check of the ASI (preferably in situ) i.a.w. manufacturer’s instructions. Max error 2 knots. Ensure colour coding has been applied as per the flight manual. |  |
| 26 | **Altimeter datum** | Check barometric sub scale. (max. error 3 Mb) |  |
| 27 | **Electrical installation/ fuses/trips** | Check all electrical wiring for condition. Check for signs of overheating and poor connections. Check fuses/trips for condition and correct rating. |  |
| 28 | **Battery** | Check battery mountings for security and operation of clamp. Check that correct fuses are fitted.  It is recommended to carry out battery capacity test (In accordance with battery manufacturer’s recommendations) on gliders equipped with radio, used for cross-country, & especially for those used in controlled airspace or for competition flying. See BGA AMP manual leaflet 4-9. |  |
| 29 | **Oxygen systems** | Inspect oxygen system. Check bottle hydrostatic test date expiry i.a.w. Manufacturers recommendations. Ensure that bottle is not completely empty (200 psi min) refill with aviator’s oxygen only. Clean masks and regulators with approved cleaning wipes.  Ensure that oxygen installation is recorded on weight and C of G schedule  **CAUTION: OBSERVE ALL SAFETY PRECAUTIONS** |  |
| 30 | **Radio installations and placards, Transponders.** | Check radio installation, microphones, & speaker. Check that call sign & aircraft registration placards are visible near radio. Carry out radio ground function test. Record type fitted.  All avionics (including transponders) to be maintained as per the manufacturer’s instructions and applicable ADs. |  |
| 31 | **Removable ballast** | Check removable ballast mountings and securing devices for condition. Check that ballast weights are painted a conspicuous colour. Check that prevision is made for the ballast on the loading placard. Check that the ballast arrangements as configured are supported by the Flight Manual (technical notes often require flight manual amendments). |  |
| 32 | **Colour coding of controls** | Ensure that controls are colour coded and in good condition, as follows;  Tow release: Yellow  Air brakes: Blue  Trimmer: Green  Canopy normal operation: White  Canopy jettison: Red  Combined canopy jettison and normal operation: White and Red  Other controls: clearly marked but not using any of the above colours |  |
| 33 | **Equipment stowed in centre section** | Check for security and condition. Check validity of any safety equipment. Check manufacturers data plates. |  |
| 34 | **Water ballast system** | Check water ballast system. Check filling points, vents, connectors & dump systems for operation and leakage. Ensure outside temperature gauge is fitted and reads ambient temperature. |  |
| 35 | **Control surface tape** | Check all control surface and turbulator tape for condition, as per BGA inspections 009/10/2000 & 011/12/2000. |  |
| 36 | **Tailplane and elevator** | With tailplane de-rigged check tailplane and elevator hinge attachments. Any de-bonding must be repaired as per SB 306-27/1. Check condition of gel coat. |  |
| 37 | **Left wing** | Check main plane structure externally and internally as far as possible. Carefully check attachment bushes for security and their surrounding structure for signs of damage. Check that all vents and drain holes are clear. Check gel coat. |  |
| 38 | **Left aileron** | Inspect aileron assembly, hinges, control connections. Ensure that seals do not impair full range of movement. |  |
| 39 | **Left air brake** | Inspect all air brake parts. Check locking forces. Too high a locking force damages the controls. Check that none of the bolts that hold the airbrake caps to the glass fibre paddles have sheared. |  |
| 40 | **Right wing** | Check main plane structure externally and internally as far as possible. Carefully check attachment bushes for security and their surrounding structure for signs of damage. Check that all vents and drain holes are clear. Check gel coat. Check registration marks are correctly applied. |  |
| 41 | **Right aileron** | Inspect aileron assembly, hinges, control connections. Ensure that seals do not impair full range of movement. |  |
| 42 | **Right air brake** | Inspect all air brake parts. Check locking forces. Too high a locking force damages the controls. Check that none of the bolts that hold the airbrake caps to the glass fibre paddles have sheared. |  |
| 43 | **Bonding/vents/drain** | Check all bonding leads & straps. Check all vents and drains are clear. |  |
| 44 | **Lubrication** | Lubricate all bearings etc. in accordance with manufacturer’s requirements. |  |
| 45 | **Markings** | Side and under-wing markings are correct. CAA ident plate present. BGA Number on fuselage. |  |
| 46 | **Mandatory checks** | Check for compliance of all mandatory modifications, airworthiness directives and inspections applicable to the airframe, accessories & equipment. Record compliance in the logbook.  LBA & EASA AD lists, BGA Compendium, BGA Technical News Sheet, BGA Mandatory inspections. |  |
| 47 | **Manufacturers recommendations and life inspections** | Review manufacturer’s maintenance schedules and instructions for continued airworthiness for the airframe to establish if any additional work, servicing or preservation action is required. For example 3000 hour inspections. **Any Deviations from TCDS holder recommendations must be recorded and signed for by the owner at near the bottom of this document.** |  |
| 48 | **Control deflections & free play** | Check all control movements and free play. Correct any that are outside the flight manual limits. Record all movements and free play after adjustments/repairs. |  |
| 49 | **Duplicate inspections** | Record each item requiring a duplicate inspection on an additional worksheet and complete prior to releasing aircraft back to service. |  |
| 50 | **Weighing** | Review weighing record to establish accuracy against installed equipment.  Check date of last weighing (BGA Maximum period between re-weighs is 8 years). See Generic Requirement 10 and BGA AMP. However, the weight & C of G must be re-calculated or the glider reweighed after any significant repairs, repainting or equipment changes. Next re-weigh due -  Note: an extra 250 grams on the tail increases min cockpit weight by ~1 Kg. If there is any doubt as to the accuracy of the placarded cockpit weight limits a re-weigh must be carried out. |  |
| 51 | **Speed/weight/**  **manoeuvre placard** | Check placard is correct and legible and accurately reflects the status of the aircraft |  |
| 52 | **Hours** | Hours from new at this inspection |  |
| 53 | **Launches** | Launches from new at this inspection |  |
| 54 | **Modifications** | Review Log Book and verify that any modifications incorporated since last Airworthiness Certificate or ARC renewal have been approved and correctly embodied and recorded |  |
| 55 | **Log book** | Complete log book entries. Ensure that all flying records are entered and up to date. |  |
| 56 | **Flight manual** | Verify that the Flight Manual is at the latest revision. |  |

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| **EASA Mandatory items.** Add ALIs (found in section 4 of modern AMM and TCDS), only add EASA and State of Design ADs carried out at this annual (add more rows/lines if required) | | | | | |
| AD 81/267  SB 306-18 | |  | Life increase 3000 to 6000 hours after inspections etc. |  | |
| AD 93/41  SB 306-30/2 | |  | Increase service life 6000 to 12000 hours after inspections etc. |  | |
| AD 1989-018/3 | |  | Tost hooks TBO 2000 flights  Next overhauls due Nose launches Winch launches |  | |
| AD 92-356  SB 306-31 | |  | Annual inspection of the airbrake stops. |  | |
| AD 2003-001/3 | |  | I’Hotelier connections, annual inspections. |  | |
| AD D-2004-168  MSB 306-38/1. & | |  | TP ball and pins to be changed after 10 years or 1000 launches, whichever comes first. To be changed at launches or by |  | |
| LBA AD 2007-181, EASA AD 2007-0135E SB 306-35 | |  | Annual inspection of welded parts in flight control system |  | |
|  | **BGA CAMO requirements**. Found in BGA compendium | | | |  | |
| TNS 1/2007 | |  | Seat harness life – on condition with annual inspections. |  | |
| BGA | |  | Annual FLARM update |  | |
| TNS 04/84 | |  | Annual check of the fuselage frames for integrity and adhesion to the skin. Also check after a ground-loop, heavy landing or other incident. |  | |
| TNS 08/87 | |  | Annual check for elevator control rods corroded in rear fuselage. |  | |
| TNS 08/87 | |  | Annual inspection for elevator vertical drive for loose rivets. |  | |
| TNS 06/92 | |  | Annual check U/C lever retaining bolt. Check for looseness in GRP |  | |
| TNS 06/95 & 04/95. | |  | Annual check of the internal rear fuselage frames for integrity. Also check after a ground-loop, heavy landing or other incident. |  | |
| Maintenance Manual page 23  & TNS 10/87 | |  | Wing to fuselage connectors annual checks. There must be more than 5mm clearance between the pins and the end of the slots with the glider rigged. New oversize balls must be fitted if the clearance is less than this. Check that all connectors have all 6 balls present. |  | |
| Maintenance Manual | |  | Annual check - The sliding tailplane locking device on the fin LE must move up at least 3mm further without the TP fitted than with it fitted. If this is not the case the next size up oversized ball must be fitted. Refer to Maintenance Manual instructions for fitting ball. |  | |
| TNS 12/98 & 06/88 | |  | Annual check of retractable u/c hinge bars. Circlips come off, recommend replace with split pins. |  | |
| BGA inspection 056-08 | |  | Check security of stick and airbrake grips as required by AAIB recommendation. |  | |
| BGA | |  | Swing compass every 3 years. Next due |  | |

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| Add any Deviations from TCDS holder and equipment manufacture recommendations from mandatory service bulletins, AMM, AFM and TCDS. The BGA requires justification and Acceptable Means of Compliance for Deviations. No deviations are permitted from Airworthiness Directives or mandatory maintenance (ALIs) or BGA CAMO requirements as specified in the maintenance/flight manuals, TDCS, ADs and BGA compendium (add more rows/lines if required) | | | | | ***Owner must sign & date below*** |
| Service/life/tbo Interval | | | Task Description | Engineering justification and alternative means  of compliance (AMC).  Add extra documents to this MIP section as required to support AMC and engineering justification of a deviation. |  |
| Original TC holder recommendations  (hrs/cycles/cal) |  | Changed to |  |
| Strap life 10 years |  | On condition | Inspect annually | BGA experience over 70 years. Ref TNS 1/2007 |  |
| Hook life 4 years or 10,000 cycles between overhauls |  | 10,000 cycles = 2000 launches | Calendar life changed to on condition | BGA experience over 70 years. |  |

**Approval/Declaration of the Maintenance Programme by the owner:**

**Declaration by the owner** (only for ELA1 aircraft not involved on commercial operations and under the conditions of Part-M, M.A.302 (h)):

I hereby declare that this is the maintenance programme applicable to this aircraft. I am fully responsible for its content and, in particular, for any deviations introduced as regards the Design Approval Holder recommendations.

I am fully aware that this aircraft cannot be operated for commercial operations.

**Name/Signature**:

**Date of Signature:**

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| --- | --- | --- | --- | --- | --- | --- |
| General Remarks | | | | | | |
| Date of ARC expiry:  Other remarks: | | | | | | |
| Record identifying marks. | Fin: | | Fuselage: | | | Under wing: |
| **Certificate of Release to Service** | | | | | | |
| **Certifies that the work specified, except as otherwise specified, was carried out in accordance with Part-M and in that respect is considered ready for release to service. BGA Approval No. UK.MF.0007.** | | | | | | |
| (\* Written signature required) | | | | | | |
| Inspector Name: | | Signed \*: | | Date: | BGA Authorisation No: | |