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

|  |
| --- |
| **Part-M and ML Aircraft Maintenance Programme (AMP)** |
| **Aircraft identification** |
| 1 | Registration: | Type: ASW 20 | 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  | ALEXANDER SCHLEICHER GMBH AND CO SEGELFLUGZEUGBAU  | ASW 20 Up to date Maintenance Manual (TN 31 added 24/6/1987) |
|  |  |  |  |
|  |  |  |  |
| **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 58) 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 58
 |
|  | **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 Schleicher ASW 20 sailplanes.

Note, the French built ASW 20F has considerable differences, especially to the ADs and mandatories.

Tim Macfadyen 31 March 2019

|  |
| --- |
| Work pack file ref:       |
| Page No:       Total pages in work pack       |

|  |  |  |  |
| --- | --- | --- | --- |
| Registration G-      | BGA No.        | Type. ASW 20 | Serial No        |

|  |  |  |  |
| --- | --- | --- | --- |
| TaskItem | Description | Inspection detail | OperationInsp/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 surfaces, 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, tubular structure, skin and attachments. Inspect for signs if corrosion on tubular framework.  |  |
| 3 | **Nose Fairing**  | Inspect for evidence of impact with ground or objects. |  |
| 4 | **Rudder** | Check rudder assembly, hinges, attachments, balance weights. |  |
| 5 | **Pot Pitot/Ventilator** | Check alignment of probe, 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 pins and associated bearings. |  |
| 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 021/10/2001Check canopy gas strut inspection ref BGA Inspection 031/05/2002 |  |
| 8 | **Seat / cockpit floor** | Inspect seat. Check that all cushions are correctly installed and secured and are made from energy absorbing foam. Ensure that the backrest fits and locks correctly. Seat trim inspection ref BGA Inspection and secured 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 with drum brake** | 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 tyres for wear, sidewall damage, perishing, pressure and creep marks have not moved.Tyre pressure, 36 psi without water ballast and 49 psi with water should be marked near wheel.**CAUTION: VERY OLD BRAKE SHOES MAY CONTAIN ASBESTOS.** |  |
|  |
| 11 | **Mainwheel, tyre & brake assembly with disc brake ASW 20b or ASW 20c** | Check for integrity of hydraulic seals and leaks in pipe work. Check thickness of pads, 3mm minimum. Check operation of brake. Check level of brake fluid and replenish if necessary.**CAUTION: Use only aircraft mineral brake fluid Esso Univis I-13 or Aeroshell fluid 4 and observe any safety precautions. Motor (Dot 4/5) fluid will wreck the seals.**Check tyres for wear, sidewall damage, perishing, bulges and pressure and that creep marks have not moved. Tyre pressure (36 PSI) should be marked near wheel. |  |
| 12 | **Undercarriage**  | Thoroughly clean all parts. Check all links and their mountings for signs of damage and corrosion.ASW 20 b&c – Check rubber suspension parts for perishing. Rubber hardens with age and eventually ceases to provide any suspension. Note: Carry out with weight off the landing gear. |  |
| 13 | **Undercarriage retraction system** | Check retraction mechanism and controls with aircraft on jacks/dolly, check warning system if fitted, doors and linkages/springs, over centre locking. Perform retraction test. |  |
| 14 | **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. |  |
| 15 | **Release hooks** | Inspect & lubricate hooks and controls. Carry out operational test of both hooks. For TBO see “Deviations from TCDS” section at the end of this SDMP.Next nose hook overhaul due Next winch hook overhaul due |  |
| 16 | **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. |  |
| 17 | **Rudder pedal assemblies & cables** | Inspect & lubricate the pedal assembly and adjustment mechanism. Inspect “S” tube welds as per AD 91-073. 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.  |  |
| 18 | **Rudder & stops** | Inspect rudder. Check that control stops (on lower rudder hinge bracket) are contacting and secure. Check that rudder assembly, hinges, attachments and balance weights are secure. |  |
| 19 | **Elevator, control circuit & stops** | With the tailplane derigged, check tailplane attachments. Inspect elevator connector/self connector mechanism. Check that control stops are contacting and secure. |  |
| 20 | **Aileron control circuit & stops** | Inspect the aileron control circuit. Check that the bell cranks are contacting the control stops correctly. The stops are parts of the wooden frames under the seat. |  |
| 21 | **Flap control circuit and detents** | Inspect flap control circuit, check that all detents and springs in the flap circuit operate correctly and detents are not excessively worn. Check the stop that is riveted to the fuselage side below the flap selector plate for distortion and security. |  |
| 22 | **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. |  |
| 23 | **Air brake control circuit** | Inspect air brake control circuit, including the position and security of the stop. Rivet the stop in place if necessary to prevent it slipping. |  |
| 24 | **Wheel brake control circuit** | Inspect wheel brake control rods/cables. If combined with air brake, ensure correct rigging relationship i.e. that the wheel brake does not prevent full airbrake being achieved. |  |
| 25 | **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. |  |
| 26 | **Pitot/static system** | Inspect pitot probe, static ports all accessible tubing for security, damage, cleanliness, kinking and condition. Drain any water from condensate drains. Perform leak check on all systems. |  |
| 27 | **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. |  |
| 28 | **Altimeter datum** | Check barometric sub scale. (max. error 3 Mb) |  |
| 29 | **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. |  |
| 30 | **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. |  |
| 31 | **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** |  |
| 32 | **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.  |  |
| 33 | **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). |  |
| 34 | **Colour coding of controls** | Ensure that controls are colour coded and in good condition, as follows;Tow release: YellowAir Brakes: BlueTrimmer: GreenCanopy normal operation: WhiteCanopy jettison: RedCombined Canopy jettison and normal operation: White and RedOther controls: clearly marked but not using any of the above colours |  |
| 35 | **Equipment stowed in centre section** | Check for security and condition. Check validity of any safety equipment. Check manufacturers data plates. |  |
|  36 | **Water ballast system** | Check water ballast system, wing and tail tanks as fitted. Check filling points, level indicators, vents, connectors & dump systems for operation and leakage.If bags are used check for leakage and expiry date as applicable. Ensure outside temperature gauge is fitted and reads ambient temperature. |  |
| 37 | **Control surface tape** | Check all control surface and turbulator tape very carefully for condition, as per TN 31 and BGA inspections 009/10/2000 & 011/12/2000. It is vitally important that these instructions are followed precisely, otherwise control surface flutter will occur. |  |
| 38 | **Tailplane and elevator** | With tailplane de-rigged check tailplane and attachments, self-connecting and manual control connections, check condition of gel coat. |  |
| 39 | **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. Ensure all boundary layer blow holes are not blocked and pressure feed system for them is serviceable.  |  |
| 40 | **Left wing aileron & flap** | Inspect aileron & flap assemblies, hinges, control connections. Ensure that seals do not impair full range of movement. |  |
| 41 | **Left air brake** | Inspect all air brake parts. Check locking forces. Too high a locking force damages the controls, too low and the centre of the airbrake paddles protrude from the wing when thermalling. |  |
| 42 | **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. Ensure all boundary layer blow holes are not blocked and pressure feed system for them is serviceable.  |  |
| 43 | **Right wing aileron & flap** | Inspect aileron & flap assemblies, hinges, control connections. Ensure that seals do not impair full range of movement. |  |
| 44 | **Right air brake** | Inspect all air brake parts. Check locking forces. Too high a locking force damages the controls, too low and the centre of the airbrake paddles protrude from the wing when thermalling. |  |
| 45 | **Bonding/vents/drain** | Check all bonding leads & straps. Check all vents and drains are clear.  |  |
| 46 | **Lubrication** | Lubricate and replenish fluids in accordance with manufacturer’s requirements. |  |
| 47 | **Markings** | Side and under-wing markings are correct. CAA ident plate present. BGA Number on fuselage. |  |
| 48 | **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.  |  |
| 49 | **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. **Any Deviations from TCDS holder recommendations must be recorded and signed for by the owner at near the bottom of this document.** |  |
| 50 | **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. |  |
| 51 | **Duplicate inspections** | Record each item requiring a duplicate inspection on an additional worksheet and complete prior to releasing aircraft back to service. |  |
| 52 | **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. The weight & C of G must be re-calculated or the glider re-weighed 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. |  |
| 53 | **Speed/weight/****manoeuvre placard** | Check placard is correct and legible and accurately reflects the status of the aircraft |  |
| 54 | **Hours** | Hours from new at this inspection |  |
| 55 | **Launches** | Launches from new at this inspection |  |
| 56 | **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 |  |
| 57 | **Log book** | Complete log book entries. Ensure that all flying records are entered and up to date. |  |
| 58 | **Flight manual** | Verify that the Flight Manual is at the latest revision. |  |

|  |
| --- |
| **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. |
| LBA AD 84-43 |  | TN 17 Life increase from 3000 to 6000 hours - Inspections and Manual update |  |
| LBA AD 98-255 |  | Life increase from 6000 to 12000 hours - Inspections and Manual update |  |
| LBA AD 87-141 |  | TN 31 Aileron flutter – incorrect use of tape Annual inspections |  |
| LBA AD 1989-018/3 |  | Tost hooks TBO 2000 flights |  |
| LBA AD 91-073 |  | Rudder pedal “S” guides cracked at welds – annual inspection |  |
| LBA AD 2003-001/3 |  | I’Hotelier connections annual inspections |  |
|  | **BGA CAMO requirements**. From BGA compendium  |  |
| BGA inspection 056-08 |   | Check security of stick and airbrake grips as required by AAIB recommendation. |   |
| BGA TNS 1/2007 |  | Seat harness life – on condition with annual inspections. |  |
| BGA |  | Annual FLARM update |  |
| BGA |  | Swing compass every 3 years. Next due |  |
| TN 31 |  | Preventative measures against aileron flutter – correct application of tapes. Annual checks. |  |

|  |  |
| --- | --- |
| 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:**

|  |
| --- |
| 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:       |