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: DG 500 Elan Orion | Serial no: |
| **Basis for the maintenance programme** |
| 2 | **Below is the BGA recommended option for sailplanes amended to suit the DG 500/505 (non-powered non-flapped version)** |  |
| **Design approval holder (DAH) maintenance data**  |
| 3 | **Equipment manufacturer and type** | **Applicable maintenance data reference (at latest revision)** |
| 3a | Aircraft  | **ELAN TOVARNA SPORTNEGA ORODJA N.SOL.O** | DG 500/505 Elan Orion Up to date Maintenance Manual |
| **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 89) to this AMP** | Yes | No |
| Maintenance due to specific equipment and modifications | Yes |  |
| 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 |
| **Pilot-owner maintenance (only for TMG operated under Part-NCO)** |
| 6 | **Does the Pilot-owner perform Pilot-owner maintenance (ref. Part-ML, ML.A.803)?**If yes, enter the name of the pilot-owner(s):Pilot-owner name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Licence Number\_\_\_\_\_\_\_\_\_ Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Yes |  |
| **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 responsible for the continuing airworthiness of the aircraft according to ML.A.201:Owner [ ]  Name of owner Address: Telephone:Email:Signature/date: |
| 9 | Appendices attached to BGA SDMP 267* Appendix A YES [ ]  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 88
 |
|  | **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 |  |
| Version 2 AD 2019-0237R1 Canopy lock inspections included TM 348/4 Annual airbrake system inspections included |  |
|  |  |

 |

BGA Self-Declared Minimum Inspection Program

form 267 for sailplanes and powered sailplanes

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

|  |  |  |  |
| --- | --- | --- | --- |
| Registration G-      | BGA No.        | Type. DG 500/505 Elan Orion | Serial No        |

|  |  |  |  |
| --- | --- | --- | --- |
| TaskItem | Description | Inspection detail | OperationInsp/check |
| **Tasks 1 to 62 applicable to all aircraft (delete row/line as or write N/A as required)****Tasks 63 to 88 apply to powered sailplanes. (delete row/line as or write N/A as required)** |
| 0 | **All Tasks General** | The aircraft must be clean. Inspect for security, damage, wear, integrity, drain/vent holes clear, signs of overheating, leaks, chafing, cleanliness and condition as appropriate to the particular task. Whilst checking 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 and fairings, gel coat/paint. Check that registrations marks are correctly applied. All turbulator tapes are fitted correctly and securely.  |  |
| 2 | **Fuselage structure** | Check frames, formers, tubular structure, skin and attachments. Inspect for signs of 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. Also check security of weights mounted on the sternpost and that they can’t jam the rudder. |  |
| 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, frames, and transparencies for cracks unacceptable distortion and discoloration. Check operation of all locks and catches. Carry out operational tests of both canopy jettisons.Canopy jam during jettison inspection ref BGA Inspection 021/10/2001. |  |
| 8 | **Seat / cockpit floor** | Inspect seats. Check that all cushions are correctly installed and secured and have only energy absorbing foam. Ensure that the rear seat adjusting strap functions correctly and is not warn. Ensure that the rear head-rest (if fitted) can’t fold forward and jam the rear stick when the glider is flown solo. Seat trim inspection ref BGA Inspection 019/10/2001 |  |
| 9 | **Cleanliness / loose article check** | Remove all access panels and remove/vacuum all debris and foreign items from entire fuselage. |  |
| 10 | **Nose wheel & mounts** | Inspect for evidence of hard/heavy landings. Inspect wheel, tyre and wheel box. Check tyre pressure. Check that tyre pressure (36 psi 2,5 Bar) is marked near to wheel. |  |
| 11 | **Mainwheel, tyre & brake assembly** | Check for integrity of hydraulic seals and leaks in pipe work, check brake pad wear. Min thickness of pads 2,5mm.Check operation of brake. Apply brake fully for 2 minutes, during which the brake lever should not reach the stop. Check for leaks. Check level of brake fluid and replenish if necessary.**CAUTION: CHECK TYPE OF BRAKE FLUID USED AND OBSERVE SAFETY PRECAUTIONS**Use DOT 4 automotive brake fluid only. If mineral based aircraft fluid is used it will destroy the seals. Change fluid at least every 4 years as it absorbs water, which can boil and prevent the brake from working. Check tyre for wear, sidewall damage, perishing, pressure and that creep marks have not moved. Check that tyre pressure (44 psi 3 Bar) is marked near to wheel. |  |
| 12 | **Undercarriage suspension** | Check springs and all attachments. Check for signs of damage to U/C and its mounting points.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 wheel** | Inspect for evidence of hard/heavy landings. Inspect wheel, tyre and wheel box. Check tyre pressure. Use only the heavy duty 6 ply tyre. Check that tyre pressure (4 bar, 58 psi) is marked near to wheel. |  |
| 15 | **Release hooks** | Inspect & lubricate hooks and controls. Carry out operational test of both hooks from both cockpits. 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 all 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** | Inspect rudder pedal assemblies and adjusters. |  |
| 18 | **Rudder control circuit & stops** | Inspect rudder cables, especially where they run through the S guides on the rudder pedals. Slacken the cables and pull them out of the S guides to check the cables. If any strands are broken or if there is any significant wear change the cable. Check that control stops are contacting and secure. Check rudder assembly, hinges, attachments and balance weights are secure. |  |
| 19 | **Elevator control circuit & stops** | With the tailplane derigged, check tailplane attachment. Inspect elevator control circuit. Check that there is minimal play in the auto connect system and that the adjusting bolt is securely locked. Check that control stops are contacting and secure.  |  |
| 20 | **Aileron control circuit & stops** | Inspect aileron control circuit. Check that control stops are contacting and secure.Inspect self-connecting control devices. |  |
| 22 | **Trimmer control circuit** | Inspect trimmer control circuit. Check that trim does not move with stick fully forward and trim fully back and visa versa. |  |
| 23 | **Air brake control circuit** | Inspect air brake control circuit. Inspect self-connecting control devices. |  |
| 25 | **Instrument panel assemblies** | Inspect instrument panel and all instruments/equipment. Check that instrument readings are consistent with ambient conditions. Check that the marking of all switches, circuit breakers and fuses is correct. As far as is possible check the operation of all installed equipment.Check that the ASIs are marked as required by the Flight Manual. |  |
| 26 | **Pitot/static system** | Inspect TE & pitot probes, static ports and all accessible tubing for security, damage, cleanliness, kinking and condition. Drain any water from condensate drains. Leak checks all systems. |  |
| 27 | **ASI operational check** | Carry out operational check of the ASIs (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 datums** | Check barometric sub scales. (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 clamps. Check for evidence of electrolyte spillage and corrosion. Check that batteries have the correct main fuses fitted. It is recommended to carry out battery capacity tests in accordance with manufacturer’s recommendations where capacity checks are recommended by the manufacturer. 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 (200psi 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. Check all instruments are marked as required by Flight Manual.**CAUTION: OBSERVE ALL SAFETY PRECAUTIONS** |  |
| 32 | **Radio installations and placards, Transponders.** | Check radio installation, microphones, speakers and intercom if fitted. Check that call sign and 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. Check filling points, level indicators, vents, dump drains for operation and leakage.Ensure outside temperature gauge is fitted and reads ambient temperature. |  |
| 37 | **Tailplane and elevator** | With tailplane de-rigged check tailplane and attachments, check condition of gel coat/paint.All turbulator tapes are fitted correctly and secure. Check condition and fitment of sealing tape ref BGA Inspection 009/10/2000Control tape and Mylar seal inspection ref BGA Inspection 011/12/2000 |  |
| 38 | **Left wing** | Check main-plane structure externally and internally as far as possible. All vents and drain holes are clear. Check gel coat. All turbulator tapes are fitted correctly and secure.  |  |
| 39 | **Left aileron** | Inspect aileron, hinges, control connections, tapes and seals. Ensure that seals do not impair full range of movement. Inspect self-connecting control device.Control tape and Mylar seal inspection ref BGA Inspection 011/12/2000 |  |
| 40 | **Left air brake** | Inspect entire air brake system. Carry out TM 348/4 inspections, see Maintenance Manual. |  |
| 41 | **Left tip extension** | Check mountings for security and wear/play. Check tip skid, aileron sealing and turbulator tape. |  |
| 42 | **Right wing** | Check main-plane structure externally and internally as far as possible. All vents and drain holes are clear. Check gel coat. All turbulator tapes are fitted correctly and secure. . Check registration marks are correctly applied. |  |
| 43 | **Right aileron** | Inspect aileron, hinges, control connections, tapes and seals. Ensure that seals do not impair full range of movement. Inspect self-connecting control device.Control tape and Mylar seal inspection ref BGA Inspection 011/12/2000 |  |
| 44 | **Right air brake** | Inspect entire air brake system. Carry out TM 348/4 inspections, see Maintenance Manual. |  |
| 45 | **Right tip extension** | Check mountings for security and wear/play. Check tip skid, aileron sealing and turbulator tape. |  |
| 46 | **Bonding/vents/drain** | Check all bonding leads & straps. Check all vents and drains are clear from debris.  |  |
| 47 | **Lubrication** | Lubricate and replenish fluids in accordance with manufacturers requirements |  |
| 48 | **Markings** | Check side and under-wing markings are correct. Check metal CAA ident plate. BGA Number on fuselage. |  |
| 49 | **Mandatory checks** | Check for compliance of all mandatory modifications, airworthiness directives and inspections applicable to the Airframe, accessories & equipment. Record compliance in the logbook.State of design Type certificate and STC holder AD list, BGA Compendium, BGA Technical News Sheet, BGA Mandatory inspections, Manufacturers mandatory check list.  |  |
| 50 | **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.** |  |
| 51 | **Control deflections & free play** | Check and range of movements and free play. Adjust if necessary so that they are within manufacturer’s limits. Record all final values. |  |
| 52 | **Duplicate inspections** | Record each item requiring a duplicate inspection on an additional worksheet and complete prior to releasing aircraft back to service. |  |
| 53 | **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 or repainting. If there is any doubt as to the accuracy of the placarded cockpit weight limits a re-weigh must be carried out. Next reweigh due- |  |
| 54 | **Speed/weight/****manoeuvre placard** | Check placards are correct and legible and accurately reflect the status of the aircraft. |  |
| 55 | **Hours** | Hours at this inspection |  |
| 56 | **Launches** | Launches at this inspection |  |
| 57 | **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. |  |
| 58 | **Log book** | Complete log book entry. Ensure that all flying records are entered and up to date. |  |
| 59 | **Manuals** | Verify that the Aircraft Flight and Maintenance Manuals are at the latest revisions. |  |

|  |
| --- |
| **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) |
| LBA AD 1989-018/3TN 1-2001 |  | Tost hook T.B.O. 2000 launches Winch hook overhaul due Launches Nose hook overhaul due Launches |  |
| LBA AD 2001-079TN 348/15 |  | Ball bearings and articulated rod ends in cockpit area. Lubricate annually.  |  |
| EASA AD 2019-0237R1 TN 500-13 |  | Canopy locking rods annual inspection for tightness |  |
|  |  | 3000 hour inspections Next inspection due hours |  |
| Maintenance Manual |  | The elevator bungee must be replaced every 6 years. Next change due |  |
| Maintenance Manual |  | The brake fluid must be changed every 4 years. Next change due |  |
| Maintenance Manual |  | The water bag bungee tension annual check as per the maintenance manual. |  |
| Maintenance Manual |  | Inspect the airbrake systems as per TM 348/4 see Maintenance Manual. |  |
|  | **BGA CAMO requirements**. From BGA compendium |  |
| BGA inspection 056-08 |   | Annual check of security of stick and airbrake grips as per AAIB recommendation. |   |
| BGA TNS 1/2007 |  | Seat harness life – on condition with annual inspections. |  |
| BGA |  | Annual FLARM update |  |
| BGA 009/10/2000  |  | Annual inspection for water ingress to flying controls. |  |
| BGA 011/12/2000  |  | Annual inspection of control surface seals. |  |
| BGA 019/06/2001  |  | Annual inspection for seat trim impeding exit by parachute. |  |
| BGA 021/10/2001  |  | Annual check of the effect of instruments on canopy jettison. |  |
| BGA 031/05/2002  |  | Annual inspection for weak canopy gas struts. |  |
| TNS 10/03 |  | Operating arms immersed in water cause bearing failure. Inspect annually. Replace shielded bearings with rubber sealed ones to prevent future failures. |  |
| TNS 10/03 |  | Failure of main gear frame, cracks from weld. Inspect after heavy landing and annually. |  |
| TNS 2-2007 |  | Annual inspection of rear seat head rest. If headrest is fitted, restraining cords must be fitted otherwise headrest can jam stick when the glider is flown solo. |  |
| TNS 3-2011 |  | Annual inspection - Rudder stops missing or loose. |  |
| TNS 3-2011 |  | Annual inspection of fixed tail ballast weights for looseness causing rudder jam. |  |
| TNS 5-2011 |  | Annual inspection for dis-bonded tailplane bush. |  |
| TNS 6-2011 |  | Annual inspection for damage to main wheel shroud (fixed wheel version only). |  |
| BGA |  | Swing compass every 3 years. Next due |  |

|  |  |
| --- | --- |
| 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 supporting AMC and engineering justification of a deviation. |  |
| Original TC holder recommendations(hrs/cycles/calendar life)  |  | Changed to |  |
| Strap life 12 years |  | On condition | Inspect annually | BGA experience over 70 years. Ref BGA 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:       |