ORDERS FOR OPERATION OF A PNGC OWNED MOTOR GLIDER

The aircraft is the property of Portsmouth Naval Gliding Club (PNGC) and is to be operated in accordance with the following orders in addition to the BGA Laws and Rules, PNGC Operating Rules, Daedalus Airfield manual and CAA Air Navigation Order.

1. AUTHORISATION

The CFI of PNGC is to maintain the following list of personnel:

- 1. Those with powers of Self Authorisation (Local Flying)
- 2. Those with powers of Self Authorisation (Land-Away)
- 3. Those empowered to act as a Club Authoriser
- 4. Those authorised to act as instructors (BGA / CAA)
- 5. Those authorised to service the motor glider.

Copies of these lists are to be kept with these rules.

2. POWERS OF AUTHORISATION

The CFI or Head or Operations (Motor-Gliders) has the right to grant, suspend or withdraw any category of authorisation. In addition, the CFI and Head of Operations (Motor-Gliders) both retain the right to stop or recall any flight taking place or flight that is scheduled to take place for any reason. When gliding operations are being conducted, the Duty instructor may also deny the conduct of a flight or recall a flight if he deems the safety of the aircraft or the persons on-board to be at risk.

A List of those who are self-authorising in each of the following categories is to be maintained by the CFI. Requests for Self Authorisation are to be made to the CFI or Head of Ops (Motor-Gliders), but the **authority will be the document held in the log cabin.**

A. Self Authorisation (Local Flying)

Those with powers of Self-Authorisation may authorise themselves to act as captain provided it is within the constraints of these rules. This does not include a flight in which a land-away is planned.

As a guide, this should be granted when a pilot achieves 20hrs P1 (powered aircraft) including 10hrs on type.

All Motor-Glider Instructors will automatically hold this authorisation.

B. Self Authorising (Land-Away)

Those with powers of Self-Authorisation may authorise themselves to act as captain of the aircraft for the purposes of landing away from Lee On Solent provided the destination is an officially registered aerodrome.

Those not Self-Authorising (Land-Away) must seek permission from one of the following:

- 1. CFI or his Deputy
- 2. Head of Operations (Motor-Gliders)
- 3. Any PNGC Approved CAA FI(SLMG)
- 4. Any PNGC Approved BGA MGIR holding Stages 1,2 and 3

As a minimum, this may be granted when an individual has achieved 30hrs P1 on type OR 20hrs P1 on type and holds a BGA Silver Rating.

All PNGC approved CAA FI(SLMG) and any BGA MGIR holding all three stages are automatically granted this authorisation.

C. Club Authoriser

Those empowered to act as a Club Authoriser may authorise any suitably qualified pilot, who is not self-authorising for a specific occasion. Care must be taken to ensure the conditions are suitable for the experience level of that individual.

A list of Club Authorisers is to be maintained by the CFI detailing what each individual may authorise others to do

D. PNGC Authorised Motor Glider Instructors

Once the relevant qualification has been awarded, the Instructor must be individually cleared to instruct by either the CFI, his deputy or Head of Operations (Motor-Gliders).

3. QUALIFICATIONS

To qualify to fly the motor glider as Captain, a pilot must:

- 1. Have a current UK or NPPL SLMG rating and a valid medical certificate.
- 2. Have been checked out by the CFI PNGC, Head of Operations (Motor-Gliders) or appointed deputies
- 3. Have his/her powered aircraft log book endorsed for Self Launching Motor Gliders.
- 4. A check flight if more than 28 days has elapsed since his/her previous motor glider flight (42 days for instructors and current tug pilots)
- 5. Have specific authorisation of the CFI PNGC, Head of Operations (Motor-Gliders) or their deputies.
- 6. 10 hours gliding experience.

4. <u>USE OF THE MOTOR GLIDER</u>

The motor glider is for PNGC use and is not normally to be used for purposes other than (In priority order):

- 1. Field landing practice and annual Field landing Checks.
- 2. Initial and reinforcement exercises for members training to the initial solo standard in winch launched gliders.
- 3. Intermediate exercises and check flights for members below Bronze C standard for winch launched gliders.
- 4. Navigation training to the BGA Navigation training standard.
- 5. Flying towards the issue of an NPPL SLMG.
- 6. Familiarisation flying for club members.
- 7. Communication flights on PNGC or RNGSA Business. Specific, Individual Authorisation required.
- 8. Ad-hoc flying by UK and NPPL SLMG pilots at the Duty Instructor's discretion.

Any use other than that specified above is to be specifically authorised by the CFI PNGC, Head of Operations (Motor-Gliders) or their deputies. The motor glider is to be self-supporting and economic rates are to be decided by the Executive committee of PNGC. Rates are to be clearly promulgated and a copy of those rates are to be kept with the technical log.

5. PRE FLIGHT RESPONSIBILITY

Servicing of the motor glider is to be carried out in accordance with PNGC/BGA regulations under the supervision of an appropriate and authorised member of the club.

Responsibility for pre-flight inspections is to rest with the pilot who is next to fly the aircraft.

Hand swinging of the propeller **IS NOT** to be carried out at any time.

6. WEATHER

The weather minima for flying are to comply with civil flight minima for VFR flight, i.e.:

- 1. Clear of cloud and in sight of land.
- 2. Flight visibility of at least 3 kms.

Furthermore, the wind speed is not to exceed 25 knots (15 knots crosswind limit).

The motor glider is only to be flown between official sunrise and sunset.

7. MINIMUM FUEL

The motor glider fuel tank contents gauge indicated fuel capacity in fractions. Careful note of the fuel state is to be taken when planning sorties. The aircraft is NOT to take off with less than 1/4 indicated and is not normally to be flown with less than 1/8 indicated.

Fuel is included in the usage rate, but uplifts away from base will only be credited back at the current PNGC fuel rate as determined by the Treasurer PNGC.

8. OPERATING REGULATIONS

No pilot is to fly the motor glider until he or she has been fully briefed and had the flight authorisation entry signed on the flight log.

The pilot is to ensure:

- 1. The motor glider has been serviced as detailed in Para 4.
- 2. The vital action checks detailed in Appendix 2 have been completed.

After starting, the motor glider is to be taxied to a suitable position to carry out engine run and pre take off checks. Before entering the active runway a radio call has to be made with Lee radio (118.925 Mhz) to establish 2 way communication and clearance to enter the active runway. Once clearance has been given you can then taxi to a position where final clearance will be given prior to departure.

Pilots are to remain vigilant during take offs, taking particular note of any winching and aerotowing that may be taking place. They are to arrange their take off runs to avoid flying over any built up areas of Lee on Solent and Stubbington until 1500 ft agl.

No pilot is to divert from his brief unless suffering an in-flight emergency without the specific authorisation of the CFI PNGC, Head of Operations (Motor-Gliders) or their deputies

When returning to land with the engine running, the standard power circuit is to be flown with appropriate radio calls. Standard power circuit heights are to be maintained throughout the power circuit.

When returning to land with the engine off, a standard glider circuit is to be flown with appropriate radio calls indicating that you are flying a glider circuit with the engine off.

Touch and Go landings are not normally permitted during intense flying periods of the day, however after consultation with the Duty Instructor, Motor Glider Instructors may arrange <u>BEFORE THE SORTIE</u> for circuit training to be carried out, provided positive radio contact is maintained with the Duty Instructor.

Back-tracks should not be automatically assumed and if another aircraft is sufficiently close behind, then the pilot should vacate the runway at either Millvil Road or at the far end of the runway. Turns to back track after landing are to be to the left. If landing on the grass to the right of the launch point on runway 05 special attention must be given to the location of winch cables that may be out at the time. **Do not taxi over winch cables at any time.**

Motor glider take offs and landings are normally to be carried out from the main runway but if the runway is not clear then the grass can be used.

AIR STARTS ARE PROHIBITED UNLESS SPECIFICALLY REQUIRED FOR NPPL SLMG TRAINING AND WHEN CAPTAINED BY A FULLY RATED MOTOR GLIDER INSTRUCTOR OR CAA EXAMINER.

MOTOR GLIDER INSTRUCTOR RATING

Before giving gliding instruction in a self-launching motor glider, an instructor must hold a motor glider instructor rating. There are currently two entirely separate motor glider instructor ratings, the BGA MGIR and the CAA FI (SLMG). These two ratings are both gained and renewed separately.

THE BGA MGIR

Privileges:

Instructing gliding exercises in a motor glider, appropriate to the group and stage held and where the instructor has a valid certificate of medical fitness (see Medical Standards)

The Rating is issued separately on three groups of motor gliders:-

Group 1	Wooden Motor Gliders
Group 2	GRP Motor Gliders
Croup 2	Detroctable Engine Mate

Group 3 Retractable Engine Motor Gliders

In addition to the above groups, each group has three separate stages:-

Stage 1	Glider handling, upper air exercises, circuits, approaches and landings
Stage 2	Stage 1 exercises plus map appreciation and glider navigation
Stage 3	Stage 1 and 2 exercises plus simulated aerotow rope breaks, field
-	selection and landing simulation and final glide simulation.

Experience requirements:

- 1. Either BGA Full Instructor Rating (gliders) or, for BGA MGIR Stage 1 only, a BGA Assistant Instructor Rating (gliders)
- 2. Current SLMG PPL or PPL with SLMG or TMG rating or NPPL (SLMG).

Initial issue:

The BGA MGIR is issued by test with an RE/SRE (note: not all REs/SREs are motor glider examiners).

Renewal:

The BGA MGIR is renewed by test with an RE/SRE bi-annually and is entirely separate to the CAA FI (SLMG). Either a BGA Full Glider Instructor rating or a BGA Assistant Instructor rating, as appropriate, must be held to maintain validity of the BGA MGIR.

THE CAA FI (SLMG)

A variety of different terms have previously been used to describe this single rating: "CAA MGIR"; "Restricted Flying Instructor Rating SLMG (MGIR)" & "FI (SLMG)". This section uses the single term: FI (SLMG).

Privileges.

Instruction in SLMG aircraft under the auspices of the BGA.

Experience requirements:

Current BGA Full Glider Instructor Rating.
Current SLMG PPL or PPL with SLMG or TMG rating.
Completion of training and test conducted by BGA Examiner with a CAA FIE rating.

Note: Candidates who do not hold the BGA Full Glider Instructor Rating must attend a CAA approved Flying Instructors' course run by a CAA approved flying training organisation

Renewal:

The CAA FI (SLMG) is renewed bi-annually by test with a BGA Examiner with a CAA FE or FIE rating or JAR TMG examiner equivalent. Note: The requirement for a current BGA Full Glider Instructor Rating is for the initial issue of a CAA FI(SLMG) following BGA recommendation. It is not required for the subsequent renewal of the CAA FI(SLMG).

Note: For both the BGA MGIR and the CAA FI (SLMG) to remain valid, the instructor must maintain a current medical certificate as required by the relevant regulations.

THE LICENCE – NPPL SLMG

The National Private Pilots Licence (NPPL) is intended for private and recreational flying within the UK. Holders are restricted to a narrower range of aircraft than are available to JAR licence holders; training requirements are simpler and the medical is similar to the GP endorsed pilot declaration familiar to UK glider pilots. Three ratings are available: Simple Single Engine Aeroplanes (SSEA), Self Launching Motor Gliders (SLMG) and Microlights. Full details are available from the NPPL web site at http://www.nppl.uk.com/

For a person without a BGA Glider Pilots Licence to obtain an NPPL with SLMG Class Rating, he/she needs to:

- 1. Carry out a minimum course of flying training totalling 32 hours, excluding the NST and GST
- 2. Pass the JAR-FCL PPL (A) theoretical exams.
- 3. Hold a valid NPPL medical declaration or JAA Class 1 or 2 medical certificate.
- 4. Pass the NPPL NST and GST in an SLMG.

ALLOWANCES AGAINST TRAINING (NPPL/XC/Rev 8 dated 26 Jan 2009 refers)

The holder of a valid BGA Glider Pilots Licence who wishes to obtain an NPPL with SLMG Class Rating shall:

- 1. Produce the BGA Glider Pilots Licence.
- 2. Produce log book evidence of having satisfactorily completed not less than 10 hours training in a self launching motor glider under the supervision of an SLMG Instructor, which must include.
- 3. Not less than 1 hour dual instruction in stall/spin awareness and avoidance.
- 4. Not less than 1 hour dual instrument appreciation.
- 5. Not less than 1 hour supervised solo flight.
- 6. Pass the JAR-FCL PPL (A) theoretical exams.
- 7. Hold a valid NPPL medical declaration or JAA Class 1 or 2 medical certificate.
- 8. Pass the NPPL NST and GST in an SLMG.

MOTOR GLIDER REDUCED PRE-FLIGHT CHECKS

C - Controls. Full and Free movement in the correct sense.

B – Ballast. Weights and balance within aircraft limits (fuel state)

S – Straps. Tight and Secure (If flying solo, ensure spare straps also.

I – Instruments. Pilot cover removed. Instruments apparently serviceable and set correctly.

F – Flaps. Not fitted.

T – Trim. Full and free movement then set for take off.

C – Canopy (ies). Closed and locked.

B – Brakes. Full and free movement both sides then closed and LOCKED.

E – Eventualities. EFATO/Aborted take off considerations.

P – Petrol. Sufficient for task. Fuel ON. Minimum 10 litres for take off.

P – Propeller. Correct Pitch. Prop Clear.

T – Throttle. Set for start. Check friction.

I – Ignition. Set as required.

M – Mixture (Choke) Set as required for start.

FULL PRE-FLIGHT CHECKS ARE CONTAINED IN THE FLIGHT REFERENCE CARDS NORMALLY AVAILABLE IN THE COCKPIT.