

PART 3: MOTOR-GLIDER OPERATIONS

1 ALL MOTOR GLIDERS

All motor-gliders operated under the auspices of PNGC shall comply with orders in this section and either section 2 or 3 as applicable.

1.1 Permission to Fly

All pilots of motor-gliders or powered aircraft operating under the auspices of PNGC shall obtain permission to fly from the Duty Instructor prior to flying. This is applicable regardless of authorization status. If no club flying is taking place, authority is to be applied as detailed in Annex C

Ultimately, the Duty Instructor, CFI or DCFI (Motor-Gliders) have the right to prevent a flight taking place in any aircraft operating under the PNGC umbrella.

1.2 Qualifications

In order to fly any motor-glider as Pilot in Command (PIC) at PNGC, the following must be adhered to:

- Be a flying member of PNGC
- Hold a valid UK, JAR or EASA FCL
- Hold a valid NPPL, JAR or EASA medical
- Hold a valid SLMG, TMG or JAR/EASA SEP rating with differences training
- Have conducted differences training as appropriate, signed in the pilot's logbook
- Hold a valid CofC
- Be 'in the green', having signed as having read all applicable documents

1.3 Certificate of Competence

1.3.1 Application

ALL motor-glider pilots flying under the auspices of PNGC are to remain in date for a valid Certificate of Competence (CofC), with the exception of those pilots who are flying under the legal supervision of a CAA Flying Instructor for the purposes of gaining a licence or rating.

Pilots may not fly any motor-glider under the auspices of PNGC without a valid PNGC CofC.

The PNGC website is to be used as the master copy of the CofC of the database.

1.3.2 Check Schedule

The following items must be included as a minimum in a CofC check flight:

- Pre-flight preparation (NOTAMs, Weather)
- License and Medical are both valid and in date
- EFATO (turn back if applicable to skill level)
- Stalling
- Engine Start / Stop (Air Start if applicable)
- Power Off circuit and landing
- 1 touch and go

The flight must be conducted to the satisfaction of the instructor. If the instructor has concerns or is not content that the minimum level of safety is maintained, he or she may refuse the issue of a CofC pending further training.

1.3.3 Period of Validity

A CofC is valid for 1 year from the date of initial issue, or 1 year from the last expiry date if being revalidated as per section 1.3.5.

1.3.4 Acquisition

After a license has been granted or a new motor-glider pilot joins PNGC, the pilot must seek a CofC check flight with a PNGC Approved CAA Motor-Glider Instructor before flying as PIC. Depending upon experience, any applicable self-authorization approvals can be added at this stage.

1.3.5 Revalidation

Revalidation is achieved by a flight with a PNGC approved CAA Motor-Glider Instructor. This may be combined with a biennial check or annual field landing exercise but must include items as detailed in section 1.3.2.

The CofC may be revalidated within the 3 months prior to expiry without loss of continuity.

1.4 Operating Regulations

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

The pilot is to ensure:

1. The motor glider has been serviced as detailed in Section 1.6.1.
2. The vital action checks detailed in Annex A have been completed.

1.5 Operating Restrictions

1.5.1 United Kingdom

No pilot is to take off from or land at a non-licensed aerodrome or strip that is not detailed in the list of approved landing sites unless prior permission has been granted by a PNGC approved authorizer.

A list of authorized sites can be found in the motor-glider.

1.5.2 Flights crossing FIR Boundaries

No pilot is to fly outside of the United Kingdom without prior permission from the CFI or DCFI (Motor-Gliders). In this case, all necessary paperwork must be completed, and a detailed brief given to the authorizer.

Pilots must ensure, when reclaiming duty on exported fuel, that sufficient flight time has elapsed since any previous claim such that the previously exported fuel has all been demonstrably burned off. Pilots are warned that PNGC takes no responsibility for this matter and that large fines or prosecution will occur if regulations are breached.

The following must be carried in the aircraft for all flights crossing an FIR boundary:

- Valid Passport
- Aircraft Insurance Certificate
- Certificate of Airworthiness or Permit to Fly
- Annual Review Certificate (Except in the case of Permit to Fly aircraft)
- Aircraft Commander's licence including Certificate of Test / Revalidation for the aircraft class or type concerned and Medical

1.5.3 Flight Out of Safe Glide Range of Land

Such cases should be kept to necessary routes only.

The following equipment must be carried in a motor-glider, in addition to that listed in 1.5.2, should a sea track of more than 20nm over water OR flight over water outside of guaranteed glide range of a safe landing area:

- Emergency Location Transmitter
- Life Jackets

1.6 Operating Procedures

No pilot is to divert from his brief unless suffering an in-flight emergency without the specific authorisation of the CFI, DCFI (Motor-Gliders) or the initial authoriser via radio communication.

1.6.1 Pre-Flight Servicing

The pilot is to ensure that a 'Check A' has been signed for during the same day; prior to flight. As a minimum this is to include:

- Check Aircraft hours and Servicing Schedule
- Check Fuel Drain for water evidence
- Perform a Daily Inspection walk-round as per the flight manual
- Ensure all documentation is current and in place

1.6.2 Pre-takeoff

After starting but prior to taxi, the pilot is to establish 2-way coms with Lee Radio on 118.925Mhz and establish airfield information. 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 ensure there is no conflicting traffic. No clearances can be given by an AGCS, so ensure a thorough check for any conflicting traffic is made prior to entering or crossing an active runway.

1.6.3 Takeoff / Climb

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 above 1500 ft AGL.

1.6.4 Engine On Landings

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.

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 **BEFORE THE SORTIE** for circuit training to be carried out, provided positive radio contact is maintained with the Duty Instructor.

1.6.5 Engine Off Landings

When returning to land with the engine off, a standard power modified circuit is to be flown with appropriate radio calls indicating a power modified circuit is being flown with the engine off.

1.6.6 After-Landing

Back-tracks should not be automatically assumed and if another aircraft is sufficiently close behind, then the pilot should vacate the runway. Turns to back track after landing are to be to opposite glider runway.

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.

1.6.7 Air Starts

Air starts are prohibited unless specifically required for NPPL SLMG training, CofC check flights or currency training and only when captained by a CAA FI(SLMG) or CAA Examiner.

1.6.8 EFATOs / Turn Backs

Practice Turn backs or Practice Engine Failures after takeoff may only be conducted with a CAA Motor-glider instructor as PIC of the aircraft.

Before initiating a turn-back, the Motor-Glider Instructor should liaise with the Duty Instructor to inform of intention

If it is possible that the exercise is likely to conflict with other circuit traffic, the exercise is not to be performed.

Turn backs are not to be initiated below 200' AGL, and once half way through the turn, ensure that you have sufficient height before committing the aircraft towards build up areas.

For training, once assured of landing or when a go-around is initiated, a turn may not be commenced until above 200ft AGL.

For training, a glider is not to be landed downwind with a tailwind exceeding 10kts.

1.7 Authorisation

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

- Those with powers of Self Authorisation (Local Flying Day Only)
- Those with powers of Self Authorisation (Land-Away Day Only)
- Those with powers of Self Authorisation (Night Local)
- Those with powers of Self Authorisation (Night Cross Country)
- Those empowered to act as a Club Authoriser (Motor-Gliders)
- Those authorised to act as instructors (BGA / CAA)
- Those authorised to service the motor glider.

The master copy of these authorisations can be found at Annex C .

1.7.1 Powers of Authorisation

The CFI or DCFI (Motor-Gliders) has the right to grant, suspend or withdraw any category of authorisation. In addition, the CFI and DCFI (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 DCFI (Motor-Gliders), but the **authority will be the document held in the log cabin, at Annex C to these regulations.**

1.7.2 Pilots Requiring Authorisation

Those who do not hold a self-authorisation category as per Annex C must seek approval to fly from a CAA rated Motor-glider Instructor that is approved to issue such authorisations as per Annex C

1.7.3 Self Authorisation (Local Flying Day Only)

Those with powers of Self-Authorisation may authorise themselves to act as PIC 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 not be granted until a pilot achieves 20hrs P1 (powered aircraft) including 10hrs on type.

All Motor-Glider Instructors will automatically hold this authorisation.

1.7.4 Self Authorising (Land-Away Day Only)

Those with powers of Self-Authorisation may authorise themselves to act as PIC 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 any empowered authoriser as stated in Annex C

As a minimum, this may be granted when an individual has achieved 50hrs P1 on type OR 30hrs P1 on type and holds a BGA Silver Rating, but is subject to a check of an understanding of relevant information and procedures by DCFI (Motor-Gliders).

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

1.7.5 Self Authorising (Night Local)

This may only be granted to those pilots who hold a JAR or EASA FCL and who additionally hold a night qualification OR Instrument Rating valid on Single Engine Aircraft.

Pilots holding this authorisation MUST remain within glide range of Daedalus unless diverting due to an emergency.

1.7.6 Self Authorising (Night Cross-Country)

This may only be granted to those pilots who hold a JAR or EASA FCL and who additionally hold a night qualification OR Instrument Rating valid on Single Engine Aircraft.

Pilots holding this authorisation must ensure they, and their passengers, acknowledge the inherent risks of night flying with a single engine, single ignition system engine.

1.7.7 Centre Authoriser

Those empowered to act as a Centre 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 provided at Annex C .

1.7.8 PNGC Authorised Motor Glider Instructors

Once the relevant qualification has been awarded, the Instructor must be individually cleared to instruct by either the CFI, DCFI (Motor-Gliders). No pilot may instruct in a PNGC operated motor-glider unless authorised to do so in Annex C or individually and specifically authorised by CFI or DCFI (Motor-Gliders).

1.8 Currency

The following currency requirements must be met prior to flying in a motor-glider being operated under the auspices of PNGC, including private and Centre owned aircraft.

Authorisation	Currency
No Self-Auth Category	As deemed sensible by Authoriser (Max 28 Days)
Self Authorising (Local)	28 Days
Self Authorising (Land-Away)	42 Days
PNGC Motor Glider Instructor	90 Days

1.8.1 Cross-Aircraft Currency

Where a PNGC member has recently flown a different type of motor-glider within the time frames stated above, he or she must have flown the motor-glider he or she wishes to fly within the previous 90 days as well as meeting their individual currency requirements.

1.9 Carriage of Passengers

A passenger is defined as any person not authorised to act as PIC of the aircraft concerned flying with a pilot that is not authorised by PNGC to instruct in the aircraft concerned.

Once a pilot has been awarded self-authorisation status, they may carry a passenger, provided that the pilot sits in the designated primary flying seat.

During the flight, the pilot may permit his or her guest to fly, but under no circumstances is the guest permitted to fly below 1000' AGL, perform any ground manoeuvres, take-offs or landings or interfere with the aircraft systems in any manner.

The pilot must have completed 3 take-offs and landings in the preceding 90 days prior to carriage of a passenger, in line with the ANO requirements.

1.10 Mutual flights

Two PNGC authorised pilots may conduct a mutual flight together subject to the following:

- Pilots must both be licensed, hold a suitable medical and be authorised to fly that particular aircraft
- PIC may only be changed over on the ground when stationary
- A pilot may only fly from the secondary seat if specifically checked out and authorised to do so as per Annex C

1.11 Night Flying

Night flying may only be conducted by pilots authorised to do so in Annex C

The aircraft must be certified for the purpose of night flying.

Section 1.9 applies for the carriage of passengers, but in addition; at least one take-off and landing must have been completed prior to carriage of a passenger.

1.12 Weather Minima

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

- Clear of cloud and in sight of land below 3000' and 140kts
- Flight visibility of at least 3 kms.

Furthermore, the wind speed is not to exceed 25 knots (15 knots crosswind limit or aircraft cross-wind limits if more restrictive).

Motor-gliders flying with pilots who hold Day Only Authorisations are only to be flown between sunrise and sunset, with the exception of instructional flights which may run into twilight hours.

2 PNGC OWNED MOTOR GLIDERS

The aircraft is the property of Portsmouth Naval Gliding Centre (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.

2.1 QUALIFICATIONS

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

1. Hold a current UK or NPPL SLMG rating or JAR/EASA FCL with differences training and a valid medical certificate.
2. Have been checked out by the CFI, DCFI (Motor-Gliders) or appointed deputies
3. Hold a current PNGC Certificate of Competence (Motor-Gliders), renewable annually.
4. Have his/her powered aircraft log book endorsed for differences training as appropriate
5. Have 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)
6. Have specific authorisation of the CFI PNGC, DCFI (Motor-Gliders) or their deputies.
7. A minimum of 10 hours gliding experience, or hold a CAA FI rating and be authorised to instruct in Annex C

2.2 USE OF THE MOTOR GLIDER

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. Flights requiring a flight plan and/or customs submissions (e.g. crossing FIR boundaries)
7. Familiarisation flying for club members.
8. Communication flights on PNGC or RNGSA Business. Specific, Individual Authorisation required.
9. 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, DCFI (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 kept attached to this document in Part 2 Annex A

2.3 BOOKING

The aircraft may be booked by individuals online up until midnight the night before.

The booking system will permit prioritisation where applicable.

The following minimum times are expected, subject to suitable weather:

Number of Slots	Minimum Flying Time
1	N/A
2	40 Mins
3	1:00
4	1:30
5	2:00
6+	2:30

Individuals are liable to be charged for the minimum time as above for soaring fees only.

2.4 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 PNGC.

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.

Jump starting or starting whilst connected to a charger (if specific connector not fitted in a safe location) is not to be carried out at any time

2.5 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. Suitable fuel must be maintained to divert if required, according to weather forecasts.

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

3 PRIVATE MOTOR GLIDERS

3.1 Operating Regulations

Private motor-gliders are to be operated within the rules laid out sections 1 and 3 of this document.

3.2 Membership

In order to fly a privately owned Motor-Glider being operated under the auspices of PNGC, the pilot must be either a Full Flying member of PNGC (Full, Ordinary, Special, Junior Special or Honorary Life) OR pay the Motor-Glider Membership Fee (see Part 1 Section 5-Membership).

3.3 Maintenance

All Maintenance is to be carried out under the supervision and authorisation of a BGA or CAA approved engineer.

At no time is any maintenance, repair work, or modification, beyond that deemed 'pilot maintenance' as described by the CAA.

Only those authorised in Annex C may conduct maintenance on motor-gliders operated under the auspices of PNGC.