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RULES & REGULATIONS FOR THE BMAA UK NATIONAL CHAMPIONSHIPS 2008 PARAMOTORS, SELF PROPELLED HANG GLIDERS & POWERED PARAGLIDER TRIKES

These rules are derived from the UK National Microlight championships rules and FAI rules for international competitions as customarily used.

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1 General

1.1.1 The rules and regulations for the 2008 BMAA UK National Championships comprise this document and the task catalogue for the appropriate class. The latest and definitive versions of all documents will be those available on the web site: <u>http://www.flymicro.com/footnat08</u>. Text in italics is included as interpretative material.

1.2 Introduction

- 1.2.1 The objectives of these championships are:
 - a. To determine the UK National Champions in the various SPHG and PPT classes, where sufficient entrants constitute a valid Championship.
 - b. To encourage participation in competitive events and foster goodwill amongst pilots.
 - c. To reward pilot skills rather than aircraft performance.
 - d. To help select the National team to go forward to the 2008 World Championships in the PF1 (Paramotor), PF2 (Tandem Paramotor), PL1 (Single-seat Paramotor Trike) and WF1 (Powered Hang Glider) classes, assuming sufficient numbers compete and that all of these classes are included in the 2008 European Championships in Poland.
- 1.2.2 Non-UK citizens are invited to compete and will be scored, but may not be named champion, unless they are permanent residents in the UK.
- 1.2.3 The entry fee is £65 (€85) if paid before 30 April 2008 and £75 (€100) thereafter.
- 1.2.4 All persons participating in, or in any way connected with a BMAA event shall be bound by the rules of the competition and accept any consequences arising from participation in the contest.

1.3 Format

- 1.3.1 The BMAA UK SPHG National Championships 2008 will take the form of a single contest.
- 1.3.2 For a contest in any class to qualify as a valid national championships contest:
 - a. There must be a quorum in a class of no less than 3 competitors with entry fees paid and who are available to fly on the first day.
 - b. The contest must contain at least three tasks: one navigation task, one economy task and one precision task.
- 1.3.3 The Competition Director shall endeavour to maintain an even balance of points for navigation tasks, economy tasks and precision tasks, weather conditions permitting.
- 1.3.4 In the event of a quorum not being present at a contest the competition may still take place but the scores cannot be counted towards the National Championships and trophies will not be presented.
- 1.3.5 Any additional requirements within the rules needed during the season will not be retrospective.

1.4 Programme

- 1.4.1 The championships will take place from 31 May 3 June 2008 and will be based at Northrepps Aerodrome, near Cromer, Norfolk. For exact details see the website: <u>http://www.flymicro.com/footnat08/index.cfm</u>.
- 1.4.2 A Mandatory initial briefing will take place at 21.00 on Friday 30 May 2008. Pilots should expect to be ready to take off on the first task by 0700 on the morning of Saturday 31 May.
- 1.4.3 In the event that meteorological conditions prevent the minimum required number of tasks from occurring, the competition for that year will be declared null & void.

1.5 Officials

- 1.5.1 Officials shall be appointed by the BMAA Council or by the delegated authority vested in the Council member responsible for competitions.
- 1.5.2 A Competition Meet Director shall be appointed to run the organisation of each contest. (See 1.2.1 "Single Contest).

1.6 Results and Prizes

- 1.6.1 A printed contest result sheet shall be made available and put on display by the organiser for all competitors to see at the end of each task. A final contest result sheet will be available to all competitors at the end of the contest and shall be posted on <u>http://www.flymicro.com/footnat08</u> once all protests have been settled and results confirmed by the BMAA.
- 1.6.2 Trophies will be awarded to the top 3 UK places, to the top overseas pilot, to the top lady and to the best newcomer.
- 1.6.3 The title of champion in each class shall be awarded at the next Annual General Meeting of the BMAA.

2 General Competition Rules

2.1 Self Propelled Hang Gliders, including paramotors (hereinafter SPHG) and Powered Paraglider Trikes (PPTs).

- 2.1.1 All aircraft must conform with the UK definition of a Self Propelled Hang Glider (including Paramotors) as defined by the CAA in the current Air Navigation Order.
- 2.1.2 PF1: A Powered Paraglider (hereinafter Paramotor) flown solo, consisting of a wing without any rigid structure (the canopy), coupled by flexible lines to a power unit which the pilot must carry on his back during take-off and landing. The wing may rest on the ground during the start of the take-off run.
- 2.1.3 PF2: As PF1, but flown dual.
- 2.1.4 PL1: A Powered Paraglider Trike (hereinafter PPT) flown solo, consisting of a wing without any rigid structure (the canopy), coupled by flexible lines to a wheeled buggy containing a paramotor power unit. The wing may rest on the ground during the start of the take-off run.

- 2.1.5 Open: Any other aircraft including Paramotors and Powered Hang Gliders (hereinafter PHG) that conform and are operated within all the conditions of the CAA's current Air Navigation Order regarding Self Propelled Hang Gliders (including Paramotors).
- 2.1.6 All take-offs and landings in the competition must be made on foot (except in the case of PL1) without the assistance of any 3rd party, any kind of vehicle or any external power source.
- 2.1.7 Each SPHG/PPT should have endurance sufficient for a flight of at least 100 Km in still air.
- 2.1.8 Each SPHG/PPT must be made available during the registration period for an acceptance check in the configuration in which they will be flown. Photographs may be taken to record the registered configuration.
- 2.1.9 All SPHGs/PPTs must be in an airworthy condition. The Director may at any time during the competition check the condition of any aircraft and ground it if he considers a safety risk exists.
- 2.1.10 The aircraft shall fly throughout each contest as a single structural entity using the same set of components as used on the first day except that propellers and spark plugs may be changed. If a pilot wishes to change any other component then they must obtain the approval of the Championship Director before participating in a task.

2.2 Entry

- 2.2.1 The deadline for registration is 25 May for UK pilots and 10 May for overseas pilots. (See <u>http://www2.flymicro.com/comps/comp.cfm?comp=124</u>). On arrival at the Competition site on Friday 30 May 2008, all pilots must check in by 2100.
- 2.2.2 The minimum age for pilots is16 years at the start of a contest.
- 2.2.3 Each competing pilot must have gained at least 30 hours as Pilot in Command on the class of SPHG/PPT to be flown.
- 2.2.4 On arrival at each contest site, each competitor must check in at the registration office to have their documents checked and to receive supplementary regulations and information.
- 2.2.5 A certificate of 3rd Party legal liability insurance valid for the aircraft to be flown is a mandatory requirement and must be shown at registration.
- 2.2.6 Pilots insured with the BHPA must show a current membership card with a SPHG rating.

2.3 Complaints and Protests

- 2.3.1 A complaint or enquiry may be made to the Competition Director to request a correction or query a score. It should be made with the minimum of delay and within the specified time limit, by completing a Complaint/Enquiry form (available from the Comp HQ) and posting in the Complaints box, also at the Comp HQ. This will be checked frequently and complaints/enquiries will be dealt with expeditiously.
- 2.3.2 In the event that a competitor is not satisfied with the Competition Director's decision he/she may lodge a Protest in writing to a Jury comprised of the Competition Director, the BMAA Competitions representative and one other organisation official accompanied by a £20 protest fee. The protest fee will be refunded if the protest is upheld either during the competition or later at appeal.

2.3.3 At each contest, the time limit for protest is 12 hours after publication of the official task results, except that after the last task of a contest, it is 1 hour.

3 Flying and Safety Regulations

3.1 Briefings

- 3.1.1 The Competition Director will hold a pre-competition briefing covering safety rules, local area regulations, airfield circuit patterns, arrival and departure procedures, meteorology, and any additional information as deemed necessary.
- 3.1.2 All pilots are expected to pay full attention to the Competition Director and other briefing staff at the Task Briefings. Side conversations may cause the participants to miss important detail and distract other pilots who are trying to listen. Failure to respect this basic requirement may result in a pilot being awarded a 20% penalty for the task or, if repeated, being asked to leave the briefing tent, which in turn shall preclude him/her from competing in that task i.e. they shall be awarded a Zero score. (See 7.4.b. and 7.3.k.) Any pilot excluded from the initial briefing will not be permitted to participate in the competition.
- 3.1.3 Briefings will be held for competitors before each task. Full task details and any additional information as deemed necessary by the Competition Director will be given.
- 3.1.4 Attendance at all briefings is compulsory for all competitors. Failure to attend a task briefing will result in a pilot being excluded from competing in that task (See 7.4.n.)
- 3.1.5 All flight requirements given at briefings carry the status of regulations.
- 3.1.6 Regardless of competition requirements, pilots must at all time be aware of and comply with UK Air law and carry a current, relevant aeronautical chart of their choosing when airborne.

3.2 Mandatory Equipment

- 3.2.1 A protective helmet must be worn whenever the pilot is strapped into the harness of an SPHG/PPT with the intention of flight or running the engine.
- 3.2.2 The carrying of emergency parachutes is mandatory for the 2008 National Championships. Failure to comply with this regulation will result in immediate disqualification from the competition.

3.3 Prohibited Equipment

- 3.3.1 Any accessory or item of equipment considered dangerous by the Competition Director.
- 3.3.2 Disposable ballast.
- 3.3.3 Gyro instruments or other equipment permitting flight without reference to the ground.
- 3.3.4 GPS, VOR, PDA with electronic map or any other electronic aid capable of imparting useful navigational information to the pilot. In the event that there are not enough MLRs for all pilots, GPSs may be carried with the express permission of the Competition Director, but must be sealed and then checked by a Marshal, to ensure that the display is not visible to the pilot. On landing, the sealed GPS must be

presented to a Marshal who shall verify that the seal is not broken. If a seal is broken or the Marshal believes that the GPS has been used by the pilot, the pilot may be penalised or disqualified as laid out in Section 7.2.e.

- 3.3.5 Radios or any other electronic communications equipment, other than that covered in 3.3.7.
- 3.3.6 Binoculars.
- 3.3.7 Mobile phones must be registered at the start of the competition and may be carried during tasks. GPS-enabled mobiles are not permitted. During a task, they are only to be used in emergencies or for land-out retrieves and must not be used for communication between pilots, including texting. The Competition Director will use SMS text messaging to inform pilots if a task is being stopped due to meteorological conditions. Bluetooth functionality must not be enabled at any time from entering a launch deck through to completing a task. Marshals may inspect competitors' mobile phones at any time to check this.
- 3.3.8 Approved GNSS flight recorders are permitted and encouraged, so long as it is satisfactorily demonstrated that the pilot or crew has no possible in-flight access to any information it may be capable of displaying.

3.4 Fitness

- 3.4.1 The use of non-prescribed drugs, including alcohol, likely to impair a pilot's performance is prohibited. Any injury, drugs or medication taken which might affect the pilot's performance in the air must be reported to the Competition Director before flying.
- 3.4.2 As always, it is the pilot's decision as to whether he/she flies or not. If he/she considers that he/she is not fit to fly (through illness, fatigue, etc), then it is his/her responsibility to make the decision not to fly.

3.5 **Preparation for Flight**

- 3.5.1 Each SPHG/PPT shall be given a pre-flight check by its pilot and may not be flown unless it is serviceable.
- 3.5.2 EACH PILOT TAKES OFF, FLIES AND LANDS ENTIRELY AT HIS/HER OWN RISK.
- 3.5.3 Each competitor is obliged to assess the weather conditions with reference to his/her own capacity as a pilot and the performance of his/her equipment before making a decision to fly.

3.6 Airfield Discipline

3.6.1 Marshalling signals, take-off, circuit and landing patterns will be given at a briefing and must be complied with. Non-compliance will be penalised.

3.7 Flight Limitations

- 3.7.1 All manoeuvres considered dangerous are forbidden, whether a danger to the pilot, other aircraft or the public, or not.
- 3.7.2 Flight in clouds is strictly forbidden.

3.8 Collision Avoidance

3.8.1 Air Law must be observed and a proper look out must be kept at all times. It is every pilot's responsibility to avoid a collision with another. An SPHG joining another aircraft in a thermal shall circle in the same direction as that established by the first, regardless of height separation.

3.9 Test and Other Flying

- 3.9.1 No competitor may take off during the competition from the contest site without the permission of the Competition Director or a Marshal. This permission may be indicated through the flags system in 3.12.1.
- 3.9.2 Permission may be given for a test flight but if the task for that class has started the pilot must land and make a competition take-off on the task. Practising prior to a precision landing task is not permitted.
- 3.9.3 Once a task has been declared, reconnaissance flights of the route in any aircraft are forbidden.

3.10 Damage to a Competing Aircraft

- 3.10.1 The Competition Director must be informed of any damage to an SPHG/PPT without delay and before any repair is undertaken. Any replacement parts must conform to the original specifications. Change of any major part such as a wing, canopy or engine may incur a penalty.
- 3.10.2 Any aircraft may be replaced if damage has resulted through no fault of the pilot. Replacement may be only by an identical make or model or by an SPHG/PPT of similar or lower performance. Rule 3.10.1 still applies. The Competition Director may permit a pilot to complete the competition using an alternative model but they will not be permitted to score any further championship points.

3.11 External Aid to Pilots

- 3.11.1 Help from assistants is positively encouraged until a competitor enters the take-off / landing deck or pilot weighing area to start a task. From that moment onwards, all external assistance is forbidden except from marshals or those people expressly appointed by the Competition Director, until the moment the competitor leaves the deck having finished a task, or otherwise lands according to the outlanding rules. Assistance from fellow competitors is not permitted unless authorised by a Marshal.
- 3.11.2 Any help in navigation or thermal location by non-competing aircraft is prohibited. This is to ensure as far as possible that the competition is between individual pilots neither helped nor controlled by external aids.

3.12 Flags

- 3.12.1 A flag pole at the HQ will show:
 - a. No flag on display: The championship window is closed.
 - b. Green: The task has started and the launch window has opened. Pilots may take-off on a task. If the green flag is NOT flying at the announced time, then the weather is considered unsuitable for flying the task. All times associated with start times are delayed until such time as the green flag is re-hoisted.
 - c. Yellow: The launch window is temporarily closed and pilots may not take-off. However, if they are already airborne and undertaking a task, then they may continue.

- d. Red/Jolly Roger: ALL pilots are to land immediately / not take-off. Applies to free-flyers and competitors.
- e. Union Flag: free flying is permitted by registered competitors and registered non-competitors but all competition restrictions apply to ALL pilots (including no fly zones). The Championship Director retains the right to impose penalties during free-flying, including the withdrawal from non-competitors of the permission to fly.

3.13 Landing Obstructions

- 3.13.1 In the event of an incident occurring or of an obstruction on the landing deck, a marshal shall be posted upwind of the obstruction with a red flag and, where a spot landing task is prevented from proceeding, the spot shall be covered with a tarpaulin, indicating that precision landings are not to be attempted.
- 3.13.2 Pilots returning from a task are to land at the designated alternative landing area (which will be briefed depending on wind conditions), or if unavailable, at the opposite end of the landing deck from the obstruction.
- 3.13.3 In such a situation, pilots are to watch for and comply with all directions from marshals, whilst maintaining full awareness of other returning aircraft.
- 3.13.4 If circumstances prevent pilots from attempting a scored precision landing, the Competition Director will decide whether to void that part of the task, or to allow any pilots affected to re-launch after the incident to complete that part of the task. This decision will be affected by weather conditions, light and the number of pilots affected.

4 Championship Tasks

4.1 General

- 4.1.1 The official notice board is the place where all information necessary to competitors is displayed: Briefing times, fuelling times, task opening times, results etc. Whatever is on the board at the time is the official current information. It is important that competitors regularly check this notice board for changes. There can be no excuse for ignorance of news that has been posted.
- 4.1.2 To count as a championship task all pilots will be given the opportunity to have at least one flight with time to carry out the task.
- 4.1.3 A pilot will be allowed one take-off for each task (unless otherwise specified in the task description) and the task may be flown once only. However, if a pilot returns to the landing deck within 5 minutes of take off for reasons of safety, then he/she will be permitted to restart without penalty, notwithstanding any task rules governing start/finish timings. This flight time will be added to the subsequent flight time and refuelling is not permitted. In the event of landing within 5 minutes following a precision take off task, the pilot will be scored on their original take off attempts.
- 4.1.4 The Championship Director may amend task rules to accommodate classes other than PF1.

4.2 Task Period

4.2.1 Times for take-off, closing of take-off windows and last landing will be briefed. If the start is delayed, given times will be correspondingly delayed.

4.2.2 The Competition Director may suspend flying after take-offs have started, if he considers that to continue is dangerous. If the period of suspension is sufficiently long to give an unfair advantage to any competitor, the task shall be cancelled. Where possible, an SMS text message will be sent and a marker laid out on the deck as a signal to pilots already in the air. Once all competitors in a class have taken-off or had the opportunity to do so, the task will not be cancelled except for reasons of force majeure or at the Competition Director's discretion due to meteorological conditions.

4.3 Types of Task

- 4.3.1 There is a task catalogue and the Competition Director will endeavour to set some of those tasks or similar tasks. He may, however, choose to set tasks that are not in the catalogue.
- 4.3.2 Tasks are divided into 3 Categories
 - a. Flight planning, navigation estimated time and speed with unlimited fuel.
 - b. Fuel economy, speed, range, duration.
 - c. Precision.
- 4.3.3 Tasks in one category may be combined with other task categories or set separately.

4.4 The Secure Area

- 4.4.1 This is a clearly marked area where aircraft must be placed from time to time as instructed by the Competition Director. Once in the secure area no aircraft may be touched for any reason without the express permission of the Competition Director other than to remove it from the secure area.
- 4.4.2 Unauthorised interference with an aircraft in a Secure Area may result in disqualification as laid out in 7.2.1d.

4.5 The Landing Deck

- 4.5.1 A landing deck is a clearly marked area of at least 100m x 100m.
- 4.5.2 A landing deck is a prohibited area except to contest officials and pilots who are in the process of taking-off or landing.
- 4.5.3 There will be one landing deck provided for every 30 competitors.
- 4.5.4 Where there is a requirement for more than one deck, they may be combined to make larger decks, e.g. for 50 pilots, an area of 200m x 100m.
- 4.5.5 Unless otherwise briefed, all take-offs and landings are to be made within a landing deck.
- 4.5.6 A landing deck will have at least one wind-sock within 100m of its boundary.
- 4.5.7 The organiser will endeavour to ensure there are no significant obstacles within 200m of the boundary of a landing deck.
- 4.5.8 Unless otherwise briefed, penalties will be awarded to Pilots if any part of their SPHG/PPT touches the ground anywhere outside the landing deck during a task.

4.6 The Airfield Boundary

4.6.1 The airfield boundary is the recognised boundary of the airfield upon which the landing decks are situated.

4.7 Take-Off

- 4.7.1 No pilot may take-off without permission from the Competition Director or a Marshal.
- 4.7.2 Each pilot must ensure carefully that his/her equipment is properly in order before attempting to take-off. He/she must not attempt to take-off if this is not the case.
- 4.7.3 Either a Window Open Time or a Given Order of Take-off may be applied to tasks.
- 4.7.4 All take-offs, unless otherwise briefed, must be executed entirely within the landing deck, except for emergency provisions given at briefing. Failure to comply will result in a penalty of 20% of the pilot's score.
- 4.7.5 A competitor will generally be allowed only one take-off for each task and the task may be flown once only unless the task description specifically states otherwise. However in the event of a mechanical or GNSS flight recorder failure occurring within 5 minutes of take-off, a further start may be made without penalty although the overall flight time for the task would include all flights. Exceptions and penalties will be specified in the Task Description.
- 4.7.6 Before departure, any pilot and/or his/her SPHG/PPT may be inspected at any time for contraventions of any competition regulations. It is the duty of competitors to assist marshals as much as possible in assisting and expediting any inspection.
- 4.7.7 Except in specified tasks, an aborted take-off does not in principle attract any penalty; however, the pilot must comply with any instruction from the marshals to expedite a re-launch or the pilot risks being relegated to the end of the queue.
- 4.7.8 In the case where the take-off order is given, marshals may restrict the number of pilots on a take off deck at any one time:
 - a. The first 6 pilots must be ready to take-off at the start of the task.
 - b. Every pilot must take-off before the sixth pilot after him in the given order has taken off or a 20% penalty shall apply.
 - c. If a marshal considers a pilot to be causing unreasonable delay (has been on the deck more than 20 minutes with the opportunity to take-off), a 20% penalty will apply.
- 4.7.9 In the case where a particular take-off time is given, the clock will start running at that moment and the pilot may subsequently take-off at any time.

4.8 A "Clean" Take-Off

4.8.1 For PF1, PF2 and PL1, a clean take-off is defined as a take-off attempt in which the canopy does not touch the ground between the moment it first completely leaves the ground and the moment ten seconds after the entire aircraft including the pilot is airborne. Ground handling to 'build a wall' with the engine off is not considered part of the take off attempt. The canopy must be on the ground when the engine is started.

4.9 Landing

- 4.9.1 All landings, unless otherwise briefed, must be effected entirely within the landing deck. The pilot may be liable to penalty if he/she or any part of his/her SPHG/PPT touches the ground outside the deck before the SPHG/PPT is fully under control after a landing.
- 4.9.2 After landing, pilots must immediately remove their SPHGs from the deck to a parking area. It is recommended that competitors view the official notice board as soon as possible after landing to get the latest information.
- 4.9.3 In tasks where pilots are asked to make a precision landing or to land on a marker, the objective is for the pilot to make a good landing on his/her own two feet without falling over. "Falling over as a result of the landing" will be interpreted as:
 - a. GOOD: If the pilot falls to ONE knee only landing score as achieved.
 - b. BAD: If the pilot falls to TWO knees OR (PF1/PF2) if the wing is not the first part of the SPHG to touch the ground zero landing score.
 - c. BAD (WF1): If any part of the aircraft touches the ground during the landing process other than devices explicitly designed to protect the propeller zero landing score.
- 4.9.4 A landing is considered to have completed when the wing first touches the ground after the pilot's feet.
- 4.9.5 In tasks where the pilot is asked to switch off his/her engine above specific heights, the heights will be determined by:
 - a. 500 ft: "The engine must be stopped & propeller stationary for a minimum period of 60 seconds before any part of the aircraft or the pilot touches the ground."
 - b. 5 metres: "The engine must be stopped & propeller stationary for a minimum period of 2 seconds before any part of the aircraft or the pilot touches the ground."
 - c. For aircraft with clutches where the propeller may continue to freewheel, this is interpreted as "engine stopped & propeller clearly not being driven".
- 4.9.6 Obstruction at landing markers: If a pilot or any part of his/her SPHG/PPT obstructs the attempted landing or the take-off of another competitor at a landing marker then a 20% penalty will apply. However, any pilot who scores more than zero for his/her landing at a landing marker has exclusive use of the area immediately surrounding the marker for a maximum period of one minute in which to clear his/her aircraft from the area. Notwithstanding this, pilots should seek to clear the landing area as quickly as possible.
- 4.9.7 Landings outside the landing deck but within the airfield boundary will attract a 20% penalty.
- 4.9.8 Landings outside the airfield boundary are considered outlandings.
- 4.9.9 Pilots 'abandoning' their SPHGs/PPTs on the landing deck will be liable to penalty.
- 4.9.10 On landing any pilot and/or his/her SPHG/PPT may be inspected at any time for contraventions of any competition regulations. It is the duty of competitors to assist marshals as much as possible in assisting and expediting any inspection.

4.10 Outlandings

- 4.10.1 Any touch of the ground by pilot or SPHG/PPT outside the airfield boundary will constitute an outlanding.
- 4.10.2 There may or may not be a penalty applied for outlanding depending on the task being undertaken. The default rule is that outlanding will score zero and any exception will be briefed with the rest of the specific task's rules.
- 4.10.3 Upon outlanding (unplanned) and having folded his/her canopy, a pilot must contact the organisation as soon as possible and before contacting anyone else, to declare that he/she has outlanded. The organisation will need to know the pilot's precise landing location, where he/she can be picked up, and the name of the person the organisation should contact to pick him up.
- 4.10.4 The contact procedure must be followed EVERY time, even if the pilot, by outlanding, has scored zero. Failure to do so will attract a further penalty.

4.11 Emergencies

- 4.11.1 All pilots must fold up their canopies immediately upon landing. A canopy, which has not been folded within three minutes, indicates the pilot is in need of help. Any pilot who observes such a situation is obliged to render assistance, while avoiding any risk to themselves and contact the organisation as soon as possible.
- 4.11.2 A competitor landing to help an injured pilot should not, at the discretion of the Competition Director, be disadvantaged by this action.

4.12 Quarantine

4.12.1 This is a clearly marked area to which aircraft and crew must go from time to time as instructed by the Competition Director, usually for the purposes of scoring, fuel measurement and scrutinizing of fuel tank seals, fuel systems, telephone seals etc. Once in the Quarantine and without the expressed permission of the Quarantine Marshal, the crew may not communicate with anyone else and may not modify or otherwise change the configuration of their aircraft and items carried. Competitors who do not respect the rules of the Quarantine area may be liable to penalty (See 7.2.1d).

5 Control of Flight Tasks

5.1 Maps

- 5.1.1 The official map is the following Ordnance Survey Landranger 1:50,000 map:
 - a. Landranger OS Map Sheet 133 North-East Norfolk
 - b. This map is to be used in conjunction with the pilot's own current standard 1:250,000 / 1:500,000 aeronautical chart (or equivalent) for airspace information.
- 5.1.2 Pilots are expected to bring their own maps, although there will be a limited number available for sale at the Comp HQ. Unlike the previous two years, Turnpoints and No-fly-zone information will be provided for the pilots to plot on their own maps.
- 5.1.3 An official map will display all of this information for cross-checking.

5.1.4 All distances not obtained from GNSS shall be calculated from the official map and will be rounded to the nearest 100 metres.

5.2 Timings

- 5.2.1 All times are given, taken and calculated in local time to hours, minutes and seconds, as displayed on GPS loggers.
- 5.2.2 Normally, take-off times are taken at the moment a pilot's feet leave the ground.
- 5.2.3 Normally, landing times are taken at the moment a pilot's feet or any other part of the pilot or SPHG/PPT touches the ground.
- 5.2.4 Timings may also be taken when the pilot kicks a stick or flies overhead an observer or crosses a start / finish gate, as briefed for the task in question.
- 5.2.5 A task is deemed to have started the moment the first pilot to take-off is ready to take-off and ends the moment the last pilot has landed and has exited the landing deck or the pre-briefed expiry time has been reached.

5.3 Ground markers and gates

- 5.3.1 In certain designated tasks, ground markers made of one or more sheets or tarpaulins 3m x 0.5m will be laid out along the line of a route to represent different symbols.
- 5.3.2 Certain ground markers may additionally be designated as "Landing markers", where a bonus score may be available in the task for landing on the marker. Landing markers are min. 4m x 4m.
- 5.3.3 When a ground marker is observed its symbol AND position should be recorded.
- 5.3.4 "Off track markers" will be at least 125m off track.
- 5.3.5 Gates will be at least 200m wide.
- 5.3.6 Gates must be crossed in the direction of the task route unless briefed otherwise.

5.4 Turn Points

- 5.4.1 If turn points are to be identified from photographs, diagrammatic plans, or from points on a map, photocopy facsimiles of the photographs, plans or relevant sections of the map shall be distributed to each competitor at the task briefing.
- 5.4.2 If turn point positions are to be identified by latitude and longitude or by the British National Grid system, then a photocopied list must be distributed to each competitor and the positions shall have been double-checked in advance.

5.5 Flight Recorders

- 5.5.1 The status of GNSS flight recorder (FR) evidence relative to other forms of evidence is as follows:
 - a. All aircraft shall carry a FR which will be used as primary evidence.
 - b. In the event of a failure of the primary FR, a second FR, photographic evidence or observers report may be used as secondary evidence.

- 5.5.2 Only CIMA approved FRs are recommended but other types may be used by agreement with the Competition Director. Any FR capable of giving useful navigational information must be sealed in an opaque container.
- 5.5.3 Where possible, the organisation will lend each pilot a MLR flight recorder with instructions. The FR case must be clearly labelled with the pilot's name and competition number and (if applicable) this information must be entered into the memory of the FR.
- 5.5.4 Pilots may decide to carry another FR of their own as back-up in accordance with the rules at 5.5.2 and should therefore make a data transfer cable and a copy of the transfer software on CD-ROM /memory stick available to the organization if required. Pilots should ensure that they have enough memory to record long flights with a fix every 5 seconds.
- 5.5.5 Before the championship starts, each FR must be presented to the organization for inspection and recording of type and serial number.
- 5.5.6 Once the championship has started the pilot must always use the same FR. In the event of a permanent failure, another FR may be used after it has been presented to the organization for inspection and recording of type and serial number.
- 5.5.7 All FRs must be presented to the organization for inspection immediately before the start of each task. If secondary evidence is presented then both sets must be clearly marked 1 and 2. Only one set of evidence will be used to verify the flight.
- 5.5.8 All Competition GPS tracks become the property of the UK PPG Competitions Committee for subsequent analysis, training and shared learning.
- 5.5.9 It is the pilot's responsibility to ensure that he/she is fully aware of the functions and capabilities of his/her FR. e.g. How to operate the PEV marker button, that it has sufficient battery power and that the antenna is correctly positioned, etc.
- 5.5.10 Pilots using their own GPSs should be able to switch on/off either without taking the GPS out of its sealed container or ensure it is switched on BEFORE presentation for checking. Pilots will not be allowed to un-seal and re-seal after presentation for the purpose of switching on.
- 5.5.11 The scoring zone for FRs is independent of any other zone or sector. A scoring zone will normally be a cylinder of 250 m radius and of infinite height. To score a fix, a point must either be within this circle, or the line connecting two sequential track fixes must pass through the circle. Additionally the task may require one of these fixes to be associated with a pilot event mark (PEV).
- 5.5.12 Complaints about the physical mis-positioning of a scoring zone relative to EVERY location which could affect the scoring (e.g. turnpoints, hidden gates, timing gates, IP or FP points) will not be accepted unless it can be shown that the physical position of the location is outside a circle of radius R= Rp/2 where: Rp= Radius or size of the scoring zone defined by the Organisers (i.e. the physical location must lie inside an inner circle half the width of a gate or radius of a scoring zone).
- 5.5.13 A start line, IP or gate time is taken from the fix immediately before the line is crossed. A finish line or FP time is taken from the fix immediately after the line is crossed.

5.6 Alternative Evidence

5.6.1 If the pilot fails to provide satisfactory or correct evidence according to the requirements laid down in the task briefing sheet but has GNSS flight recorder

evidence and proof that this flight recorder was physically in the aircraft in question, then, at the discretion of the Competition Director, this may be used as an alternative form of proof.

5.7 Fuelling

- 5.7.1 Fuel consumption is expected to be measured by weight rather than volume. Pilots and machines are weighed before and after economy flights in order to measure the amount of fuel used. Pilots are therefore allowed to fly with unlimited fuel in economy tasks thus allowing every one to participate fully regardless of the engine's economy tasks. The pilots' fuel consumption is now scored in proportion to their bodyweight with a view to levelling the playing field. Traditional economy tasks have been adapted to take into account this new method of weighing.
- 5.7.2 Procedure for Weighing of Fuel in Economy Tasks
 - a. For the purpose of scoring: One litre of fuel = 0.74kg = 740 grams
- 5.7.3 Weighing of Pilot + Machine before Launch
 - a. The weighing scale(s) should be located in the quarantine area next to the launch deck. The pilot should only get weighed when he/she is intending to launch. It is the combined pilot + paramotor + all accessories that get weighed, in fact everything that is carried on board, with the exception of the wing. The wing must be detached from the paramotor unit and can be already prepared in the launch deck. Wing bags, if used, must either be carried by pilots when weighed or not be taken on the flight. The pilot should carry the paramotor on his/her back, as well as all equipment and accessories when stepping up onto the scale. If the pilot is moving too much on the scale, the readout will fluctuate and the highest value will be recorded. The pilot should then proceed from the quarantine area to his/her wing on the deck with a view to launch as soon as possible.
 - b. Marshals should ensure that pilots spend as little time as possible between the weighing and the launching, and may demand for a pilot to be re-weighed if necessary. Marshals should ensure that pilots are not "ballasting" themselves by grabbing soil or stones as they get ready to launch.
 - c. Food and drink weigh the same whether in the pilot's pockets or consumed. Once weighed, it is not in the pilot's interest to urinate. However, pilots finding that they need to, should ask permission and will have to be weighed again.
- 5.7.4 Weighing of Pilot + Machine after Landing
 - a. As soon as a pilot lands back on the deck, a Marshal will direct him/her to the scale(s) in the quarantine area, to be weighed immediately. The wing is detached and as before, everything else gets weighed.
 - b. Once more, Marshals will be vigilant with pilots not "ballasting" themselves with stones etc. If the pilot is moving too much on the scale the readout will fluctuate and this time, the lowest value will be recorded.
- 5.7.5 The weight of fuel used shall be the difference between the recorded weight prior to take-off and the recorded weight on landing
- 5.7.6 If the pilot appears to be suspiciously wet then the Marshal may ask for the flying suit and boots to be weighed separately as well, and take a note of it.

5.8 Bodyweight Index

- 5.8.1 The process of measuring the Pilot's Bodyweight at Registration is for the purpose of handicapping, allowing heavier pilots to be allowed a greater quantity of fuel than lighter pilots in certain tasks.
- 5.8.2 This is a one-off activity from which a Bodyweight Index is calculated and used for certain economy tasks during the competition.
- 5.8.3 When reporting to be weighed, the pilot should wear:
 - a. minimal attire: no shoes, light trousers and shirt only.
 - b. No belt, no heavy jewellery. Pockets should be emptied.
- 5.8.4 The pilot may choose to be weighed with full stomach and bladder. If the readout on the scale fluctuates, the lowest value is recorded. The pilot is then given a Bodyweight Index to be used in all scoring formulae and that corresponds directly to his/her bodyweight then divided by 100. For instance 110kg = 1.1 and 65kg = 0.65.

5.9 Minimum altitude

5.9.1 Notwithstanding the normal provisions of the ANO, the Competition Director may impose a minimum altitude (AMSL) when flying some tasks (or parts of), with penalties for contravention. Proof of contravention will be via FR evidence, taking into account the +/- 150 feet GPS altitude accuracy.

6 Scoring

6.1 General

- 6.1.1 The proportion of the scores accumulated during the Championships shall be approximately:
 - a. Navigation:1/3
 - b. Economy: 1/3
 - c. Precision: 1/3
- 6.1.2 A score given to a pilot shall be expressed to the nearest whole number, 0.5 being rounded up.
- 6.1.3 All distances are rounded to the nearest 100 metres.
- 6.1.4 All times are taken to Hours, Minutes and Seconds and in the case of precision tasks, tenths of seconds.
- 6.1.5 A pilot who did not fly in a particular task scores zero and will be marked DNF on the score sheet. A pilot who is disqualified will be marked DSQ.
- 6.1.6 Deduction of penalty points shall be made after scoring for that task is completed.
- 6.1.7 If a pilot's score is for any reason negative, including penalties, then his/her score for the task will be taken as zero.
- 6.1.8 The overall results will be computed from the sum of the task scores for each competitor, with the winner having the highest total score in the class.

6.1.9 Unless specified on the task sheet, scores are always normalised to the maximum amount (the winner of the task gets the maximum points available).

7 Penalties

7.1 General

7.1.1 In general, any infringement of any flying, safety or task regulation will result in pilots being awarded a penalty or other sanction.

7.2 Disqualification

- 7.2.1 Actions that will normally result in disqualification are as follows:
 - a. Bringing the contest, its organisers, the BMAA, the BHPA or the National Championships into disrepute. The use of hostile 'tactical protests' falls into this category.
 - b. The use of performance enhancing drugs.
 - c. Not informing the organisation of an injury, medical complaint or medication being taken.
 - d. Unauthorised interference with an aircraft in a Secure Area.
 - e. The use of an unsealed GNSS flight recorder or other forbidden equipment.
 - f. Flight outside the specified flight envelope of the aircraft or dangerous flying.
 - g. Non-carrying of an emergency parachute.
 - h. Flight or attempted flight with prohibited equipment.
 - i. Unauthorised assistance during a task.
 - j. Use of any other transport during a task (before declaring an outlanding).
 - k. Any local rule imposed by the Competition Director at a task briefing carrying a disqualification penalty which is subsequently found to have been broken.
 - I. Repeated violation of additional rules.
 - m. Any flight or other activity deemed by the Competition Director to be unsafe or unsporting.
 - n. Repeated disruption of task briefings.

7.3 Zero Score

- 7.3.1 Actions which will normally result in a Zero score for the task are as follows:
 - a. Unauthorised changes to canopy, wing or power unit.
 - b. Flight without Helmet.
 - c. Unauthorised take-off.
 - d. Outlanding in a task where it is not permitted or failure to inform the marshals of an outlanding.
 - e. The aircraft disappears from the sight of the marshals (where remaining in view is a requirement of the task).
 - f. Departure from the permitted flight area (where this is a requirement of the task).
 - g. The task is not completed in the given order (where this is a requirement of the task).

- h. Any local rule imposed by the Competition Director at a task briefing carrying a Zero score penalty which is subsequently found to have been broken.
- i. Repeated disruption of a briefing.
- j. Assistance on the ground during the course of a task without permission of the Competition Director, Chief Marshal or his/her nominated deputy
- k. Violation of additional rules specified during the briefing.
- I. Failure to attend a briefing.

7.4 20% Penalty

- 7.4.1 Actions which will normally result in a 20% penalty for the task:
 - a. Pilot late to the briefing
 - b. Disruption of the briefing

7.5 Decisions & Protests

7.5.1 The Competition Director's decision is final, but where appropriate, pilots may challenge decisions using the correct process as described in section 2.3.