# LOCAL REGULATIONS FOR THE IX WORLD MICROLIGHTS CHAMPIONSHIP

## III WORLD PPG CHAMPIONSHIP



to be held at Long Marston in the United Kingdom between Saturday 23 August and Sunday 31 August 2003

# ORGANISED BY THE BRITISH MICROLIGHT AIRCRAFT ASSOCIATION & THE ROYAL AERO CLUB OF THE UNITED KINGDOM

## ON BEHALF OF THE FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE

Organiser Address: BMAA

Bullring Deddington Banbury Oxfordshire OX15 0TT

 Tel:
 01869 338888

 FAX:
 01869 337116

 E-mail:
 keith@negal.com

 Official Web Site:
 www.wmc2003.org

Pre-registration site: www.flymicro.com/COMPS

#### **AUTHORITY.**

These Local Regulations are to be used in conjunction with the General Section and Section 10 of the FAI Sporting Code which shall take precedence over the Local Regulation wording if there is ambiguity

## **CLARIFICATION**

Note:

Microlight aircraft classes AL1, AL2, WL1 and WL 2 are "Classic classes".

Microlight aircraft classes PF1, PL1, PL 2 and RWF1 are "New classes".

Microlight aircraft class AL1, AL2, WL1, WL 2 and PL2 are "Heavy classes".

Microlight aircraft class PF1, PL1 and WF1 are "Light classes".

Microlight aircraft class PF1 is "PPG", PL1 and PL2 are "PPT",.

#### **CONTENTS**

#### 1. Part One for All classes

- 1.1. General
- 1.2. Program dates
- 1.3. Officials
- 1.4. Entry
- 1.5. Insurance
- 1.6. Language
- 1.7. Medals and prizes
- 1.8. Championship classes
- 1.9. General competition rules
- 1.10. Flying and safety regulations
- 1.11. Championship tasks
- 1.12. Control of task flights
- 1.13. GNSS flight recorders
- 1.14. Scoring

## 2. Part Two for AL1, AL2, WL1 and WL2 (Classic classes)

- 2.1. General remarks
- 2.2. Contest Numbers
- 2.3. Protective equipment
- 2.4. Flight Control
- 2.5. Scoring

## 3. Part Three for PF1 (PPG class)

- 3.1. General remarks
- 3.2. Contest numbers
- 3.3. Equipment
- 3.4. Flight Control
- 3.5. Flying the tasks
- 3.6. Scoring

## 4. Part Four for PL1 & PL2 (PPT classes)

- 4.1. General remarks
- 4.2. Contest numbers
- 4.3. Equipment
- 4.4. Flight Control
- 4.5. Flying the tasks
- 4.6. Scoring
- Annex 1 Organiser's Trophies
- Annex 2 Minors Consent Form
- Annex 3 Entry Form

## Part One - Applies to All Classes

#### 1.1 GENERAL

The purpose of the championships is to provide good and satisfying contest to determine the champion in each class and to reinforce friendship amongst pilots and nations (S10 Chapter 4, 4.2).

#### 1.2 PROGRAMME DATES

Training, aircraft inspection, registration: Wednesday 20 August 2003

Opening Ceremony: Saturday 23 August 2003

First Competition briefing: Saturday 23 August 2003

Contest Flying Days: Sunday 24 August to Saturday 30 August

Closing Ceremony, Prize-giving Sunday 31 August 2003

#### 1.3 OFFICIALS

Event Director: Keith Negal keith@negal.com

Classic Competition Director: Rob Keene rob@overfarm.freeserve.co.uk

PPG Competition Director: Richard Meredith-Hardy rmh@flymicro.com

Chief Marshal: Jeremy Hucker Jeremy.Hucker@tesco.net

Admin Manager Dawn Dewhurst dawn\_dewhurst@yahoo.co.uk

Quality Manager Geoff Weighell Geoff@EnstoneMicrolights.co.uk

International Jury: Tomas Backman Sweden (President)

Tom Gunnarson USA
Carlos Trigo Portugal

Stewards: Jan Bem Czech Republic

Wolfgang Lintl Germany

Jacek Kibinski Poland

## 1.4 ENTRY

The Championships are open to all Active Member and Associate Member countries of FAI who may enter in each classic class 6 pilots, in the PF1 class from 4 to 6 pilots depending on overall numbers (to be confirmed on the official website not later than 19 May 2003) and in the PPT classes 4 pilots.

- Entries must be made on the official Entry Form.
- If applications, with fees paid, are not received by 31 May 2003 the entry may be refused.
- The entry fee is:
  - €400 for pilot in each class
  - €400 for each co-pilot (navigator)
  - €200 for each Team Leader and accompanying persons.

A discount of €50 per person will be allowed for all entry fees paid by 1 May 2003. A reduced discount of €25 per person will be allowed for all entry fees paid by 31 May 2003. The entry fee includes:

- Competition operations (setting, controlling and evaluating the tasks)
- All competition materials (maps, films, task descriptions, control point atlases, etc.)
- Free use of the airport and free entry to all official events.
- Camping place for each team with water, electricity and one tent

The entry fee is to be transferred before 31 May 2003 to the WMC2003 bank account, details of which will be confirmed on the official website not later than 1 April 2003.

#### 1.5 INSURANCE

The following insurance is obligatory:

- Third party insurance of minimum £250,000 is obligatory
- Personal accident insurance for team members valid in the UK and including flying in microlight competitions (organisers will arrange insurance services for those competitors with insufficient cover).

and insurance against damage to aircraft is highly recommended. Documentary proof of insurance as specified on the Entry Form must be presented to the Organisers at Registration. (GS. 3.9.6)

#### 1.6 LANGUAGE

The official language of the Championships is English.

#### 1.7 MEDALS AND PRIZES

FAI medals will be awarded to:

- Pilots placed first, second and third in each class
- National teams placed first, second and third in the classic classes
- National teams placed first, second and third in the in PPG class (PF1)
- National teams placed first, second and third in the PPT classes (PL1 & PL2)
- FAI Diplomas will be awarded for those placed first to tenth

Other trophies to be awarded by the Organiser are detailed in Annex 1

#### 1.8 CHAMPIONSHIP CLASSES

The Championships may be held in the following classes (S10 Chapter 1, 1.5):

- WL1 solo weight-shift
- WL2 dual weight-shift
- AL1 solo 3-axis
- AL2 dual 3-axis
- PF1 solo powered paraglider
- PL1 solo powered paratrike
- PL2 dual powered parachute

Each class is a championship in its own right and as far as possible interference of one class by another shall be avoided.

## **1.8.1** CLASS VIABILITY (S10 Chapter4, 4.3.2)

For the championships to be valid there must be competitors from no less than 4 countries in a class, with entry fees paid.

#### 1.8.2 CHAMPIONSHIP VALIDITY

The title of Champion in any class shall be awarded only if there have been at least 6 separate tasks.

#### 1.9 GENERAL COMPETITION RULES

#### 1.9.1 REGISTRATION

All competitors must pre-register on the COMPS website;

http://www.flymicro.com/COMPS. As an incentive for this to be done properly, all those who have correctly pre-registered will automatically be entered in a draw, the two prizes for which will be GNSS flight recorders.

On arrival at WMC2003 the Team Leader and members must report to the Registration Office to have their documents checked and to receive supplementary regulations and information. The following documents are required:

- Pilot License and qualifications
- Evidence of competitor's nationality
- Valid FAI Sporting License for pilot and navigator
- Minors Consent Form if pilot or navigator is under the age of 18 years
- Aircraft Certificate of Airworthiness or Permit to Fly and Minimum Speed Declaration
- Evidence of conformity to class rules
- Certificates of third party and personal accident insurance
- Receipt for payment of entry fees.

The Registration Office will be open as indicated on the information board. Registration forms may be inspected by Team Leaders on request prior to the start of competition flying

#### 1.9.2 PILOT AND NAVIGATOR QUALIFICATIONS

A competing pilot shall be of sufficient standard to meet the demands of an international competition and hold a valid pilot license or equivalent certificate. Both pilot and navigator must hold an FAI Sporting License issued by his own NAC. The pilot must have reached the age of 16 years and the navigator must have reached the age of 14 years. Any pilot or navigator under the age of 18 years must have a duly signed Minors Consent Form (Annex 2)

#### 1.9.3 AIRCRAFT AND ASSOCIATED EQUIPMENT

Aircraft and equipment provided by the competitor must be of a performance and standard suitable for the event.

Each aircraft must possess a valid Certificate of Airworthiness or Permit to Fly not excluding competition flying. This document must be issued in or accepted by the country of origin of the aircraft or the country entering it or the country of the organisers. The aircraft must comply with the FAI definition of a microlight at all times (S10 Chapter1, 1.3.1/1.3.2).

The aircraft shall fly throughout the championships as a single structural entity using the same set of components as used on the first day except that propellers may be changed provided that the weight limit is not exceeded and the Certificate of Airworthiness or Permit to Fly is not invalidated. (S10 Chapter 4, 4.19.4)

All aircraft must be made available during the Registration period for an acceptance check in the configuration in which they will be flown. The organisers have the right to

inspect for class conformity and airworthiness and, if necessary, ground any aircraft for safety reasons at any time during the event.

Fuel systems will be inspected and may be photographed prior to the start of the competition. All aircraft must be equipped with a simple method of sealing the fuel tank.

#### 1.9.4 TEAM LEADER RESPONSIBILITIES

The Team Leader is the liaison between the organisers and his team. He is responsible for the proper conduct of his team members, for ensuring that they do not fly if ill or suffering from any disability which might endanger the safety of others and that they have read and understand the rules.

#### 1.9.5 STATUS OF RULES AND REGULATIONS

Once competition flying on the first day has started no rules or regulations may be changed. Any additional requirements within the rules needed during the event will not be retrospective. Competitors may not be substituted, change to another class nor change their aircraft (S10 Chapter 4, 4.19.4).

#### 1.9.6 REST DAYS

Rest days will only be held as a result of bad weather or unforeseen emergency.

## 1.9.7 COMPLAINTS AND PROTESTS

A competitor who is dissatisfied on any matter may, through his Team Leader, make a complaint in writing to the Competition Director. Complaints shall be made, and dealt with, without delay. Complaints concerning provisional scores must be made in writing within the time limit specified on the PROVISIONAL score sheet (see A3, 1.6.1.8). A complaint that could affect a task result, shall be dealt with and answered in writing before any official score sheet is issued. If the competitor is dissatisfied with the decision, the Team Leader may make a protest to the director in writing within 12 hours of publication of the OFFICIAL task results, except that after the last contest task it is 2 hours. The protest fee is 50 Euros (Chapter 4, 4.30.1-2)

#### 1.10 FLYING AND SAFETY REGULATIONS

#### **1.10.1** BRIEFING

Briefings will be held for Team Leaders and/or competitors on each flying day. The time and place for briefing meetings and any postponements will be prominently displayed.

All briefings will be in English and be recorded in notes, by tape recorder or video. A full task description, met information, flight safety requirements, penalties and details of any prohibited or restricted flying areas will be given in writing, as a minimum, to Team Leaders, Jury members and Stewards. (S10 Chapter4, 4.17.1)

Procedures for flight preparation, takeoff, flying the task, landing and scoring together with any penalties will be specified in each task description. (S10 Chapter 4, 4.17.1/3/4)

Flight safety requirements given at briefing carry the status of regulations. (S10 Chapter 4, 4.17.2)

Team Leaders' meetings, in addition to briefings, may be called by the Director, but shall be held within 18 hours if requested by five or more Team Leaders. (S10 Chapter 4, 4.18.)

## 1.10.2 COMPLIANCE WITH THE LAW

Each competitor is required to conform to the laws and to the rules of the air of the United Kingdom. (S10 Chapter 4, 4.19.1)

#### 1.10.3 PREPARATION FOR FLIGHT

Each aircraft shall be given a pre-flight check by its pilot and may not be flown unless it is serviceable. (S10 Chapter 4, 4.19.3)

#### 1.10.4 FLIGHT LIMITATIONS

Each aircraft shall be flown within the limitations of its Certificate of Airworthiness or Permit to Fly. Any manoeuvre hazardous to other competitors or the public shall be avoided. Unauthorised aerobatics are prohibited.(S10 Chapter 4, 4.19.2)

#### 1.10.5 DAMAGE TO A COMPETING AIRCRAFT

Any damage shall be reported to the organisers without delay and the aircraft may then be repaired. Any replacement parts must be replaced by an identical part, except that major parts such as a wing for a paraglider controlled aircraft may be replaced by a similar model or one of lesser performance. Note. Change of major parts may incur a penalty. (S10 Chapter 4, 4.19.4)

An aircraft may be replaced by permission of the Competition Director if damage has resulted through no fault of the pilot. Replacement may be only by an identical make or model or by an aircraft of similar or lower performance and eligible to fly in the same class.(S10 Chapter 4, 4.19.5)

#### 1.10.6 TEST AND OTHER FLYING

No competitor may take-off on a competition day from the contest site without the permission of the Competition Director. 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 task is not permitted. (S10 Chapter 4, 4.21)

#### **1.10.7** FITNESS

A pilot may not fly unless fit. 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.

Every nation has the full responsibility to fight against doping. Anti doping control may be undertaken on any competitor at any time.

The decision to impose anti doping controls may be taken by the FAI, the organiser or the organiser's national authority.

All relevant information can be found on the FAI Web site: www.fai.org/medical

#### 1.10.8 AIRFIELD DISCIPLINE

Marshaling signals and circuit and landing patterns will be given at briefing and must be complied with. Non compliance will be penalised.

#### 1.10.9 COLLISION AVOIDANCE

A proper look-out must be kept at all times. An aircraft joining another in a thermal shall circle in the same direction as that established by the first regardless of height separation.

A competitor involved in collision in the air must not continue the flight if the structural integrity of the aircraft is in doubt. (S10 Chapter 4, 4.20.5)

#### 1.10.10 CLOUD FLYING

Cloud flying is prohibited and aircraft may not carry gyro instruments or other equipment permitting flight without visual reference to the ground. (S10 Chapter 4, 4.20.6)

#### 1.10.11 ELECTRONIC APPARATUS:

Radios, VOR, GPS and similar electronic navigation aids are prohibited. The normal penalty is disqualification from the competition. CIMA approved GNSS flight recorders and ELT's without voice transmission capability are permitted. Mobile phones may be carried in a pre-declared sealed container for use solely in the event of an emergency. The director must be immediately informed if the seal is broken. (S10 Chapter 4, 4.22.3)

Before each task the Competition Director will ask Marshals to check for infringements. The normal penalty is disqualification from the competition.

#### 1.10.12 EXTERNAL AID TO COMPETITORS

Any help in navigation or thermal location by non-competing aircraft, including a competing aircraft not carrying out the task of their own class is prohibited. This is to ensure as far as possible that the competition is between individual competitors neither helped nor controlled by external aids. (S10 Chapter 4, 4.22.1/2)

#### 1.10.13 PROHIBITED AREAS

On registration competitors will be supplied with details of areas in which overflying is prohibited. Any competitor who overflies a prohibited area at any time from arrival at Long Marston to the end of the competition may be disqualified.

#### 1.10.14 PRACTICE PRECISION LANDINGS

Certain times during the practice week will be set aside for spot landings and competitors will be notified and briefed accordingly. At no other time are practice spot landings permitted. Any competitor who practices spot landings outside of these times may be disqualified.

#### 1.11 CHAMPIONSHIP TASKS

#### **1.11.1** GENERAL

To count as a valid championship task all competitors in the class concerned will be given the opportunity to have at least one contest flight with time to carry out the task.

A task for each class may be different and a task may be set for all classes. (S10 Chapter 4, 4.24.4)

A competitor will generally be allowed only one take-off for each task and the task may be flown once only. 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. Exceptions and penalties will be specified in the Task Description. (S10 Chapter 4,4.25.2)

Precision tasks may be combined with other tasks or set separately.

#### 1.11.2 TASK PERIOD

Times for take-off, closing of take-off windows, turn points and last landing will be displayed in writing. If the start is delayed, given times will be correspondingly delayed unless specifically briefed to the contrary.

#### 1.11.3 TASK SUSPENSION OR CANCELLATION

The Competition Director may suspend flying after take-offs have started, if 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. 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. (S10 Chapter 4, 4.25.3)

#### 1.11.4 TYPES OF TASKS

Only tasks approved by CIMA or listed in S10 Annex 4 will be used:

- A Flight planning, navigation estimated time and speed, with no fuel limitation.
- B Fuel economy, speed range, duration, with limited fuel.
- C Precision

A catalogue of tasks (and their scoring systems) to be implemented during the championship is attached to these local regulations.

#### 1.11.5 FLYING THE TASKS

Any part of a competition task may be flown

- along a set course in the direction specified at the briefing, or;
- along an in flight decided course in the direction selected by the pilot, or;
- according to a local pattern specified at the briefing.

The resulting complete task is the combination of the above.

Order of take off may be

- a scheduled take off order, balloted by the Organiser, or;
- an open window, or;
- the current championship or reverse championship order.

The actual scheduled take off order is annexed to the relevant Task Description.

If a touch and go is required in order to separate parts of a task, details will be given in the Task Description and at the briefing.

#### 1.11.6 OUTLANDINGS

Outlandings will normally be scored zero, unless specifically stated at the briefing. If a pilot lands away from the goal field or from base he must inform the organisers by telephone, with the minimum of delay and at the latest by the closing time of the task. He may break the fuel tank seal and fly home or return by road. Evidence of the landing place must be obtained from photographs and the name and addresses of a witness other than the pilot's national team. On return to base the pilot must go immediately to Control with his report and films. Failure to follow this procedure without good reason may result in no score for the task, charges for any rescue services called out, or disqualification. (S10 Chapter 4, 4.27.1)

#### 1.11.7 FLIGHT BOUNDARIES

Flights terminating beyond the boundaries of the organiser's country shall score only to the point where a straight line between the start point or last turn point and the landing place last cuts the boundary, unless permission is given at briefing to cross such boundaries.(S10 Chapter 4, 4.28.1)

#### 1.11.8 EMERGENCIES

A competitor landing to help an injured pilot should not, at the discretion of the Competition Director, be disadvantaged by this action.

#### 1.12 CONTROL OF TASK FLIGHTS.

#### **1.12.1** TIMING

All times are given, taken and calculated in local time to the nearest second.

## **1.12.2** FUELLING

Fuel will be measured by weight or volume but will be consistent for any given refuelling session. Measured fuel quantities include oil where it is mixed with petrol.

Refuelling will be in the order and in accordance with the instructions given at briefing. Failure of the aircraft to be present on time may result in penalty for the pilot.

## 1.12.3 ACCURACY

Landing accuracy will be verified by video cameras.

#### 1.12.4 GATES, TURNPOINTS AND MARKERS

Gates are normally a straight line 250m wide perpendicular to the briefed track.

Gates may be:

- Known gates. Their position and height to be crossed will be briefed.
- Hidden gates. The height to be kept along the sections of the course where they are situated will be briefed.

Proof of passing a gate and its timing will be by Marshals report or GNSS flight recorder evidence, as briefed.

Control points may be:

- a geographical point,
- a ground marker
- a landing marker
- a kicking stick (PPGs).

Control points may be:

- known control (turn) points; their position and description will be briefed.
- hidden control points; the track along which they will be found and their description will be briefed.

Proof of reaching a control point may be by:

- photography
- the competitor recording the symbol and position on the declaration sheet
- a Marshal's report.
- flight recorder evidence

The precise requirements will be described in the Task Description.

#### 1.13 GNSS FLIGHT RECORDERS

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

If, by 1 April 2003 there are no suitable CIMA approved flight recorders available, then the status of GNSS flight recorder evidence relative to other forms of evidence will be as follows:

- Photographic evidence, observers report or other 'traditional' methods will be used as primary evidence.
- All aircraft should carry a FR which may be used as secondary evidence.

Information on the status and availability of CIMA approved GNSS Flight recorders will be maintained on the official web site.

- **1.13.2** Only CIMA approved FR may be used and they must be operated in strict accordance with their approval documents. (S10 Annex 6)
- **1.13.3** The FR to be used by a pilot in a championship will be supplied by the pilot. The FR case must be clearly labelled with the pilots name and competition number and (if applicable) this information must be entered into the memory of the FR.
- **1.13.4** The pilot must make a data transfer cable and a copy of the transfer software on 1,44Mb floppy disk available to the organization if required.

Before the championship starts each FR must be presented together with its CIMA approval document to the organization for inspection and recording of type and serial number. The pilot must be sure it fully complies with any requirements in the approval document e.g. that manufacturer's seals are intact and it is equipped with a data-port sealing device if it is required or it will be rejected by the organization.

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 together with its CIMA approval document to the organization for inspection and recording of type and serial number.

All FR's 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.

It is the pilots responsibility to ensure that he is fully aware of the functions and capabilities of his FR eg. how to operate the PEV marker button, that it has sufficient battery power and that the antenna is correctly positioned etc.

- **1.13.10** Where FR data is to be used for scoring, the organiser must have visited every location which could affect the scoring and got a GNSS fix of that position, e.g. turnpoints, hidden gates etc. It is not acceptable to extract positions from a map in any circumstances. Points that will not require FR evidence for scoring (eg. because a Marshal is taken times at a hidden gate) must be specifically briefed.
- 1.13.11 The scoring zone for FR's is independent of any other zone or sector (eg. photo sector). A scoring zone will normally be a cylinder of 250 m radius and of infinite height. To score a fix 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).
- **1.13.12** A start line, SP, IP or gate time is normally taken from the fix immediately before the line is crossed. A finish line or FP time is normally taken from the fix immediately after the line is crossed.

#### 1.14 SCORING

#### **1.14.1** GENERAL

The overall results will be computed from the sum of the task scores for each competitor, the winner having the highest total score in the class. (S10 Chapter 4, 4.29.1)

A score given to a competitor shall be expressed to the nearest whole number, 0.5 being rounded up. (S10 Chapter 4, 4.29.4)

All distances not obtained from GNSS shall be calculated from the official map and will be rounded up to the nearest 0.5 km. All times are taken to hours, minutes and seconds. (S10 Chapter 4, 4.29.4)

A pilot who did not fly scores zero and will be marked DNF on the score sheet. A pilot who is disqualified will be marked DSQ (S10 Chapter 4, 4.29.5)

Deduction of penalty points shall be made after scoring for that task is completed.(S10 Chapter 4, 4.29.6)

If a pilot's score is for any reason negative including penalties his score for the task will be taken as zero. Negative scores will not be carried forward. (S10 Chapter 4, 4.29.7)

The following standard symbols will be used for scoring:

V = Speed, D = Distance, T = Time

The scoring system to be used shall be approved by the FAI Microlight Commission and attached to the Local regulations. Score sheets shall state the Date for the task and the date and the time when the score sheet was issued, the task description, Task number, classes involved, Competitors name, Country of competitors, the Competitors Number and Score. Score sheets shall be marked *Provisional*, *Official* or if a protest is involved, *Final*. (S10 Chapter 4, 4.29.1)

## 1.14.2 PENALTIES

In general, any infringement of any flying, safety or task regulation will result in penalty.

Actions which will normally result in disqualification:

- a. Bringing the event, its organisers, the FAI or the sporting code into disrepute. The use of hostile 'tactical protests' falls into this category.
- b. The use of banned substances.

- c. Unauthorised interference with an aircraft in a Secure Area.
- d. Flight outside the specified flight envelope of the aircraft or dangerous flying.
- e. Flight or attempted flight with prohibited equipment.
- f. Unauthorised assistance during a task.
- g. Interference with the firmware or software of a CIMA approved GNSS flight recorder

## Part Two – Applies to Classes AL1, AL2, WL1, WL2 (Classic Classes)

#### 2.1 GENERAL REMARKS

#### **2.1.1** RANGE

All aircraft will be expected to have a still air range of 250 km.

#### 2.1.2 THE SECURE AREA

Is a clearly marked area where aircraft must be placed from time to time as instructed by the director. Once in the Secure Area and without the express permission of the director, no aircraft may be touched for any reason other than to remove it from the Secure Area. Competitors who do not respect the rules of the Secure Area may be liable to penalty.

#### 2.1.3 TAKE-OFF AND LANDING

Unless it is stated differently in the task description - all competition take-offs and landings must be completed within a deck 100m x 25m. The penalty for failing to take off or land entirely within the deck will be 20% of pilot score, as briefed.

#### **2.1.4** CONTROL OF CLASS CONFORMITY:

All aircraft will be weighed before the event with pilots in the clothing and equipment and with the aircraft carrying the equipment in which they will compete. Any aircraft may be weighed again at any time in the championships. The take-off weight is the weight of the aircraft ready to fly including pilot(s), fuel, and any supplementary equipment. The take-off weight must not exceed the FAI definition of a microlight for the class in which it is flown.

#### 2.1.5 CONTEST NUMBERS

The numbers or letters supplied by the organisers shall be displayed on a suitable space on the underside of the wing with their top towards the leading edge. The underside wing number shall be of a colour contrasting to the background. . Identification may also be required on other parts of each microlight (e.g. fin, cockpit side or pilot's helmet).

#### 2.1.6 PROTECTIVE EQUIPMENT

A protective helmet must be worn on all flights unless this restricts vision from within an enclosed cockpit canopy with supine seating. An emergency parachute system is highly recommended. (S10 Chapter 4, 4.20.1)

## 2.2 FLIGHT CONTROL

#### **2.2.1** FUEL

Prior to fuelling for economy tasks competitors must be able to demonstrate that their aircraft tanks are empty and that the engine cannot run in either the ground or in-flight attitude of the microlight.

#### **2.2.2** DISTANCE MEASUREMENTS

Distance will be measured for all competitors on the same official map, of a scale of 1:250 000. Measurement will be made to the nearest 0,5 km.

## 2.3 SCORING

#### 2.3.1 CROSS COUNTRY TASKS

The maximum score may be up to 1000 points per task and is calculated as follows:

 $P = Q/Qmax \times 1000$ 

where: Q = pilot score, Qmax = best score for the task, P = Total score

## 2.3.2 PRECISION TASKS

Maximum score: 250 points per task or 2 x 250 points for the combined precision task.

- 2.3.3 The number of tasks flown in each class during the Championships must as far as possible be very close to: A:B:C = 0.5 : 0.25 : 0.25
- 2.3.4 The winner of each class shall be the pilot or crew gaining the highest total points in the class.(Chapter 4, 4.5.6)
- 2.3.5 The team prize shall be computed from the sum of the scores of the top three pilots from each country in each class in each task. The task score for which a pilot was disqualified shall not count for team scoring. Other valid tasks flown by this pilot are not affected.(Chapter 4, 4.5.6)

## Part Three – Applies to Class PF1 (PPG)

#### 3.1 GENERAL REMARKS

#### 3.1.1 RANGE

All aircraft will be expected to have a still air range of 100 km.

#### 3.1.2 THE SECURE AREA

Is a clearly marked area where aircraft must be placed from time to time as instructed by the director. Once in the Secure Area and without the express permission of the director, no aircraft may be touched for any reason other than to remove it from the Secure Area.

Competitors who do not respect the rules of the Secure Area may be liable to penalty.

#### 3.1.3 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 leaves the ground and the moment ten seconds after the entire aircraft including the pilot is airborne.

#### 3.1.4 THE LANDING DECK

- A landing deck is a clearly marked area 100m x 100m.
- There will be one landing deck provided for every 30 competitors.
- A landing deck will have a windsock within 100m of its boundary.
- There will be no significant obstacles within 200m of the boundary of a landing deck.
- Unless otherwise briefed, penalties will be awarded if pilots or any part of their PPG touches the ground anywhere outside the landing deck during a task.

## 3.2 CONTEST NUMBERS

PPG's shall carry the number centrally on the underside of the paraglider, top towards the leading edge.

#### 3.3 EQUIPMENT

#### 3.3.1 EMERGENCY EQUIPMENT

An emergency parachute is not to be considered as a part of the structural entity of a PPG and may be removed or added during a competition.

#### 3.3.2 PROTECTIVE EQUIPMENT

A protective helmet must be worn whenever the pilot is strapped into the harness of a PPG. An emergency parachute system is highly recommended.

## 3.3.3 PROHIBITED EQUIPMENT

In addition to those items detailed in Part 1 of the local regulations: Disposable ballast & binoculars.

#### 3.4 FLIGHT CONTROL

#### 3.4.1 TIMINGS

Timings will normally be taken from GNSS FR evidence of crossing a gate.

Timings may also be taken:

- At the moment the signal is given to take off.
- At the moment a pilot's feet leave the ground on takeoff

- When the pilot kicks a stick.
- When the pilot makes a touch and go.
- When the pilot flies overhead an observer.
- When the pilot's feet or any other part of the pilot or PPG touch the ground upon landing.

According to the briefing for the task in question.

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.

In the case of a take-off time window, the precise time of take-off is entirely at the discretion of the pilot but should be within the overall time window. 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.

## 3.4.2 DISTANCE MEASUREMENT

Distance will be measured for all competitors on the same official map, of a scale of 1:50,000. Airspace infringement control will be measured on the standard UK aeronautical 1:250,000 map.

#### 3.4.3 FUEL MEASUREMENT

Fuel will be measured by weight or volume but will be consistent for any given refuelling session. Refuelling will be in the order and in accordance with the instructions given at briefing. Failure of the aircraft to be present on time may result in penalty for the pilot.

Competitors must be able to demonstrate that their entire fuel system is empty.

#### 3.4.4 FLIGHT ACCURACY MEASUREMENT

#### Landing markers

Certain ground markers may 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.

## Kick sticks

- Some tasks may involve the use of "Kicking sticks". A valid strike on a stick is one where the pilot or any part of the PPG has been clearly observed to touch it.
- The stick should be approx. 2m in height, visible from a range of at least 250 meters, and of a construction such that it is unlikely to enter a PPG's propeller once struck. (Standard ski slalom posts are recommended).
- One or more sticks may be used in a task for the purposes of separating elements of that task (e.g. to take a time) and a bonus score may be available for successfully kicking a sequence of sticks in a given order and/or time.

## 3.5 FLYING THE TASKS

## 3.5.1 PROPORTIONS

The proportion of the tasks accumulated during the Championships is approximately A:B:C = 1/3:1/3:1/3

### 3.5.2 ASSISTANTS

Help from assistants is positively encouraged until a competitor enters the deck 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.

#### 3.5.3 TAKE-OFF

A PPG must be foot launched for all tasks.

No pilot may take-off without permission from the Competition Director or a Marshal.

Open window or given order of take off may be applied to tasks.

All take-offs, unless otherwise briefed, must be effected 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.

Before departure a pilot and/or his PPG may be inspected at any time for contravention of any regulations. It is the duty of competitors to assist Marshals as much as possible in assisting and expediting any inspection.

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 relaunch or the pilot risks being relegated to the end of the gueue.

In the case where the take-off order is given:

- No more than six pilots are permitted on a take off deck at any one time.
- The first 6 pilots must be ready to takeoff at the start of the task.
- Every pilot must take off before the sixth pilot in order after him has taken off or a 20% penalty will apply.
- 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.

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.

#### 3.5.4 FLIGHT LIMITATIONS

Aerobatics and manoeuvres such as stalls, B-line stalls, deep stalls and spins are prohibited. 'Big ears' is accepted.

#### 3.5.5 LANDING

All landings, unless otherwise briefed, must be effected 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.

- Upon landing, pilots must immediately remove their PPG's from the deck.
- Landings outside the landing deck but within the airfield boundary will attract a 20% penalty.
- Pilots 'abandoning' their PPG's on the landing deck will be liable to penalty.

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 own two feet without falling over. "Falling over as a result of the landing" will be interpreted as:

- GOOD: If the pilot falls to ONE knee landing score as achieved.
- BAD: If the pilot falls to TWO knees OR if any part of the power unit touches the ground during the landing process zero landing score.

In tasks where the pilot is asked to switch off his engine above specific heights, the heights will be determined by:

- 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."
- 15 ft: "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."

Obstruction at landing markers: If a pilot or any part of his PPG obstructs the attempted landing or the takeoff of another competitor at a landing marker then a 20% penalty will apply. However, any pilot who scores more than zero for his 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 aircraft from the area.

#### 3.5.6 EMERGENCIES

All pilots must fold up their canopies immediately upon landing. A canopy that 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 and contact the organization as soon as possible.

#### 3.6 SCORING

#### 3.6.1 ALL TASKS

The maximum score may be up to 1000 points per task and is generally calculated as follows:

 $P = Q/Qmax \times 1000$ 

Where: Q = pilot scores, Q max = best score for the task, P = Total score

but, depending on the task, absolute scores for pilots' performance may also be awarded either in combination with the above or exclusively. Where a combination is used the total available absolute score shall not be more than 50% of the total available score.

e.g.:  $P = Q/Qmax \times 750 + y$  (where the maximum value of y would be 250)

OR P = y (where the maximum value of y could be 1000)

In all cases: P = Total score, Q = pilot score, Q max = best score for an element of the task, y = an absolute score

The winner of the class shall be the pilot gaining the highest total points in the class

The PPG team prize is computed from the sum of the scores of the top 3 pilots of each country in each class and each task, provided that there are at least 5 teams with a minimum of two pilots in each. The task score for which a pilot was disqualified shall not count for team scoring. Other valid tasks flown by this pilot are not affected.

## Part Three - Applies to Classes PL1 & PL2 (PPT's)

#### 4.1 GENERAL REMARKS

#### 4.1.1 RANGE

All aircraft will be expected to have a still air range of 100 km.

#### 4.1.2 THE SECURE AREA

Is a clearly marked area where aircraft must be placed from time to time as instructed by the director. Once in the Secure Area and without the express permission of the director, no aircraft may be touched for any reason other than to remove it from the Secure Area. Competitors who do not respect the rules of the Secure Area may be liable to penalty.

#### 4.1.3 A "CLEAN" TAKE OFF

Is defined as a take off attempt in which the wing does not touch the ground between the moment it first leaves the ground and the moment ten seconds after the entire aircraft including the pilot is airborne.

#### 4.1.4 THE LANDING DECK

Will be according to the relevant task description.

 Unless otherwise briefed, penalties will be awarded if pilots or any part of their aircraft touches the ground anywhere outside the landing deck during a task.

#### 4.2 CONTEST NUMBERS

PPT's shall carry the number centrally on the underside of the canopy, top towards the leading edge.

#### 4.3 EQUIPMENT

#### 4.3.1 EMERGENCY EQUIPMENT

An emergency parachute is not to be considered as a part of the structural entity of an aircraft and may be removed or added during a competition.

#### 4.3.2 PROTECTIVE EQUIPMENT

A protective helmet must be worn whenever the pilot is strapped into the seat. An emergency parachute system is highly recommended. .

#### 4.4 FLIGHT CONTROL

#### 4.4.1 TIMINGS

Timings will normally be taken from GNSS FR evidence of crossing a gate.

Timings may also be taken:

- At the moment the signal is given to take off.
- At the moment the aircraft wheels leave the ground on takeoff
- When the pilot makes a touch and go.
- When the pilot flies overhead an observer.
- When any part of the PPT touches the ground upon landing.

According to the briefing for the task in question.

A task is deemed to have started the moment the first pilot is ready to take-off and ends the moment the last pilot has landed and has exited the landing deck. In the case of a take-off time window, the precise time of take-off is entirely at the discretion of the pilot but take off should fall within the overall time window. The clock starts running either at that moment or as briefed.

In the case when 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.

#### 4.4.2 DISTANCE MEASUREMENT

Distance will be measured for all competitors on the same official map, of a scale of 1:50,000. Airspace infringement control will be measured on the standard UK aeronautical 1:250,000 map.

#### 4.4.3 FUEL MEASUREMENT

Prior to fuelling for economy tasks competitors must be able to demonstrate that their aircraft tanks are empty and that the engine cannot run in either the ground or in-flight attitude of the microlight.

#### 4.4.4 FLIGHT ACCURACY MEASUREMENT

Ground markers are constructed of canvases pegged onto the ground with measures of 4m x 0.7 m and with a colour differentiating them from the ground. The shape of the markers is taken from a marker-catalogue.

## 4.5 FLYING THE TASKS

#### 4.5.1 PROPORTIONS

The proportion of the tasks accumulated during the Championships is approximately

PL1: A:B:C = 1/3:1/3:1/3

PL2: A:B:C = 1/4:1/2:1/4

#### 4.5.2 ASSISTANTS

Help from assistants is positively encouraged until an aircraft enters the deck 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 aircraft leaves the deck having finished a task, or otherwise lands according to the outlanding rules.

## 4.5.3 TAKE-OFF

A PPT must take off on its wheels for all tasks.

No pilot may take-off without permission from the Competition Director or a Marshal.

Open window or given order of take off may be applied to tasks.

All take-offs, unless otherwise briefed, must be effected 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.

An aircraft may be inspected at any time for contravention of any regulations. It is the duty of competitors to assist Marshals as much as possible in assisting and expediting any inspection.

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 relaunch or the pilot risks being relegated to the end of the gueue.

## 4.5.4 FLIGHT LIMITATIONS

Aerobatics and manoeuvres such as stalls, B-line stalls, deep stalls and spins are prohibited. 'Big ears' is accepted.

#### 4.5.5 LANDING

All landings, unless otherwise briefed, must be effected entirely in 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.

- Upon landing, pilots must immediately remove their PPT's from the deck.
- Landings outside the landing deck but within the airfield boundary will attract a 20% penalty.
- Pilots 'abandoning' their PPT's on the landing deck will be liable to penalty.

In tasks where the pilot is asked to switch off his engine above specific heights, the heights will be determined by the task description.

Obstruction at landing markers: If a pilot or any part of his PPT obstructs the attempted landing or the takeoff of another competitor at a landing marker then a 20% penalty will apply. However, any pilot who scores more than zero for his 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 aircraft from the area.

#### 4.5.6 EMERGENCIES

All pilots must fold up their canopies immediately upon landing. A canopy that 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 and contact the organization as soon as possible.

#### 4.6 SCORING

#### 4.6.1 ALL TASKS

The maximum score may be up to 1000 points per task and is generally calculated as follows:

 $P = Q/Qmax \times 1000$ 

Where: Q = pilot scores, Q max = best score for the task, P = Total score

but, depending on the task, absolute scores for pilots' performance may also be awarded either in combination with the above or exclusively. Where a combination is used the total available absolute score shall not be more than 50% of the total available score.

e.g.:  $P = Q/Qmax \times 750 + y$  (where the maximum value of y would be 250)

OR P = y (where the maximum value of y could be 1000)

In all cases: P = Total score, Q = pilot score, Q max = best score for an element of the task, y = an absolute score

The winner of the class shall be the pilot gaining the highest total points in the class.

The team prize shall be computed from the sum of the scores of the top three pilots from each country in each class in each task provided that there are at least 4 teams with a minimum of two pilots in each. The task score for which a pilot was disqualified shall not count for team scoring. Other valid tasks flown by this pilot are not affected.

## **Annex 1, Organiser's Trophies**

#### 1 Pilot achievement score

**1.1** A Pilot Achievement Score (PAS) will be calculated in the following manner.

PAS score = 
$$10,000 \times \frac{Sp}{SMax}$$

Where:

Sp = total pilot score in all tasks in the class Smax = maximum possible score in all tasks in the class

**1.2** A pilot may only be awarded a PAS if, at the end of the championships he is not disqualified and the class he was competing in is a valid championship class in all respects.

## 2 Manufacturer's Team Trophies.

- 2.1 Will be awarded in the Classic, PPG and PPT Classes. The team score is the sum of the 3 greatest PAS scores in each team.
- **2.2** Before the start of the championship, pilots of any nation may assemble themselves into teams where:

Classic classes: their airframe OR engine are made by the same manufacturer.

**PPG**: their backpack OR canopy OR engine are made by the same manufacturer.

PPT: their airframe OR canopy OR engine are made by the same manufacturer

- Each team will be identified by the manufacturer's name.
- There may be only one team for each manufacturer.
- Pilots may not transfer between teams once the championship has started.
- There must be least 5 teams with a minimum of two pilots in each team.

# **Annex 2, Minors Consent Form**

| Participant [name]  |
|---|
| of [address]  |
| or [address]  |
| born on [Date of Birth] is a [pilot / crew member] (delete as applicable)                 |
| selected to represent [country]   |
| for the sport of [type of sport & discipline]   |
| at the 2003 World Microlight championships taking place between [dates]                   |
| Parent / Guardian   |
| [name]  |
| of [address],   |
| being a person over the age of 18 and [relationship to participant]                       |
| hereby consent to [name of participant],  |
| being a person under the age of 18 on 23 August 2003, participating in the championships. |
| [Signed][Date]  |

## **Annex 3, Entry Form**

## **ENTRY FORM FOR WMC2003**

World Microlight Championships to be held at Long Marston in the United Kingdom between 23 August and 31 August 2003

| Name of National Aero Club                                      |            |           |                |                         |                      |                  |
|---|------------|-----------|----------------|-------------------------|----------------------|------------------|
| Address   |            |           |                |                         |                      |                  |
| Tel   |            |           | . fax          |                         |                      |                  |
| E-mail  |            |           |                |                         |                      |                  |
| We wish to enter the following com Rules (General Section 3.7): | petitors v | vho qu    | alify und      | er the F <i>F</i>       | Al Nationality or Re | esidence         |
| Name  | Age        | Sex       | Comp.<br>class | P1<br>NAV<br>ASST<br>TL | Sporting Licence N°  | Pilot Licence N° |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
|   |            |           |                |                         |                      |                  |
| Note : The maximum number of air Regulations                    |            |           |                |                         |                      |                  |
| Name of Team Leader   |            |           |                |                         |                      |                  |
| Names/number of Assistants if kno                               | wn         |           |                |                         |                      |                  |
| Names/number of accompanying to                                 | echnical o | officials | s if know      | n                       |                      |                  |

#### **ENTRY FEES**

|                    | Fee                                     | Number | Total Entry fee                         |
|--------------------|---|--------|---|
| Pilot / Nav        |   |        |   |
| Assistant          |   |        | *************************************** |
| Team Leader        | *************************************** |        | *************************************** |
| Technical Official |   |        | *************************************** |
|                    |   |        |   |

| This amount is enclosed/will be paid by (date) in the form of £ sterling   |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |
| Note: The closing date for the receipt of entry fees is 28 days before the start of the event. Late entries may not be accepted. |  |  |  |  |  |  |  |  |
|  | We declare that the above information is true. |  |  |  |  |  |  |  |
|  | Signed : Position in NAC                       |  |  |  |  |  |  |  |
|  | Print Name Date                                |  |  |  |  |  |  |  |
|  | Tillit I vallic                                |  |  |  |  |  |  |  |

## **INSURANCE:**

Each competing aircraft shall be covered for public liability risk to the value of £250,000. Competitors are required to have personal accident cover. Proof of cover must be provided at Registration and before the aircraft is flown.

#### **PUBLICITY:**

Photographic and biographical information of all team members should be entered in the preregistration website, http://www.flymicro.com/COMPS.