

**LOCAL REGULATIONS  
FOR THE  
7th WORLD MICROLIGHT CHAMPIONSHIPS**

**Matkopuszta Airport, Hungary  
23 - 31 July, 1999**

**ORGANISED BY  
the Hungarian Aeronautical Association**

**ON BEHALF OF THE  
FÉDÉRATION AÉRONAUTIQUE  
INTERNATIONALE**



Organiser Address: H-1027 Budapest, Margit krt. 1 , Hungary  
Tel: 00 36 30 9 485 094, 00 36 1 316 6383  
FAX: 00 361 239 4458  
e-mail: [ordody@mail.matav.hu](mailto:ordody@mail.matav.hu)  
Ordody C&C home page: [www.nexus.hu/ordody](http://www.nexus.hu/ordody)

**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

## **Abbreviations**

WMC: World Microlight Championships  
 A3: Sporting Code Section 10 Annex 3  
 TBD: to be decided

Note: "Classic Classes" are WSC, WTS, FSC and FTS Classes.

## **Content**

1. Section to All Classes	2. Section to Classic Classes	3. Section to PPGs
1.1. General Definitions	2.1 Definitions	3.1. Definitions
1.2. Championship Classes	2.2 Contest Numbers	3.2. Contest numbers
1.3. General Competition Rules	2.3. Equipment	3.3. Equipment
1.4. Flying and Safety Regulations	2.4. Flight Control	3.4. Flight Control
1.5. Championships Tasks	2.5. Flying the Tasks	3.5. Flying the tasks
1.6. Scoring	2.6. Winning	3.6. Scoring Method

## **Section 1: Applies to All Classes**

### **1.1. GENERAL**

1.1.1. The purpose of the championships is to provide good and satisfying contest flying in order to determine the champion in each class and to reinforce friendship amongst pilots and nations (S10-4.2).

#### **1.1.2. PROGRAMME**

Training, aircraft inspection, registration	17 - 23 July, 1999
Opening Ceremony	23 July, 18.00
First Competition briefing	24 July, 09.00
Contest Flying Days	24 -30 July
Closing Ceremony, Prizegiving	31 July, 11.00

#### **1.1.3. OFFICIALS**

Director	Marton Ordody
Deputy Director	Endre Martinecz
PPG Director	Richard Meredith Hardy
Steward:	Ann Welch

### **International Jury**

There will be two Juries; the Classic Classes Jury and the PPG Jury, each consisting of a representative from each participating team, both bodies presided by the same President. One representative from a team may represent the country in both Juries. Each Jury decides with a simple majority vote. All Jury representatives will be nominated before the start of the first task of the championships and are not replaceable without the specific agreement of the Jury President.

A quorum of 2/3 of team representatives still in the competition is required. Attendance at Jury meetings is compulsory. No proxies are allowed.

President: Miroslaw Rodzewicz

#### **1.1.4. ENTRY**

The Championships are open to all Active Member and Associate Member countries of FAI who may enter any number of microlights not exceeding 20.

Not more than 6 may be entered in any one class (S10-4.10.1).

Entries must be made on the official Entry Form.

If applications, with fees paid, are not received by 28 days before registration, the entry may be refused.

Entry fee is 300 USD for pilot and co-pilot, 100 USD for Team Leaders and accompanying persons. 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.

Entry fee is to be transferred before 30th May to the bank account specified on the Entry Form.

#### 1.1.5. **INSURANCE**

Third party insurance is obligatory, personal accident insurance for the team members and CASCO type insurance of the aircraft is highly recommended. The Organiser accepts no responsibility for accidents and damages related to the Championships either caused or suffered. Documentary proof of insurance as specified on the Entry Form must be presented to the Organisers at Registration.

#### 1.1.6. **LANGUAGE:** The official language of the Championships is English.

#### 1.1.7. **MEDALS AND PRIZES**

FAI medals will be awarded to

- Pilots placed first, second and third in each class with Diplomas for those placed fourth to tenth.
- National teams placed first, second and third both in Classic and in PPG Classes,

Trophies may also be awarded for outstanding achievements

The "Silence Cup" will be awarded to the most silent aircraft in each class under conditions published in the Championship Bulletins.

## **1.2. CHAMPIONSHIP CLASSES**

### 1.2.1. The Championships may be held in the following classes (S10-1.3):

- WSC** Flexwing Solo Class: One or two seat aircraft flown solo and having a gross mass not exceeding 300 kg.
- WTS** Flexwing Two Seater Class: Two seat aircraft flown with two persons and having a gross mass not exceeding 450 kg.
- FSC** Fixed Wing Solo Class: One or two seat fixed wing aircraft with moveable aerodynamic controls flown solo with a gross mass not exceeding 300 kg.
- FTS** Fixed Wing Two Seater Class: Two seat fixed wing aircraft with moveable aerodynamic controls flown with two persons with a gross mass not exceeding 450 kg.
- PPG** Powered Paraglider Class: Foot launched powered paraglider flown solo.

### 1.2.2. 2-seat aircraft flown by a crew of 2 must be flown by the same 2 persons throughout the championships.

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

### 1.2.4. Sub-classes: There will be no sub classes at the WMC'99.

### 1.2.5. **CLASS VIABILITY** (S10-4.4.1)

If in any class there are less than 5 countries the Director may, before the start of the championships, allocate the aircraft to other classes provided they fulfil the requirements of the class.

## **1.3. GENERAL COMPETITION RULES**

### 1.3.1. **REGISTRATION**

On arrival the team leader and members shall report to the Registration Office to have their documents checked and to receive supplementary regulations and information. The following documents are required:

- Pilot Licence and qualifications
- Evidence of competitor's nationality
- Valid FAI Sporting Licence for pilot and navigator
- Aircraft Certificate of Airworthiness or Permit to Fly and Minimum Speed declaration
- Evidence of conformity to class rules
- Certificate of Insurance as detailed on Entry Form

- Receipt for payment of entry fees.

The Registration Office will be open as indicated on the information board.

### 1.3.2. **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 licence or equivalent certificate. He must hold an FAI Sporting Licence issued by his own NAC. The navigator must have reached the age of 14 years and hold a sporting licence.

### 1.3.3. **AIRCRAFT AND ASSOCIATED EQUIPMENT**

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

- 1.3.3.1. 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 (S10-1.2.1/1.2.2).
- 1.3.3.2. The aircraft shall fly throughout the championships as a single structural entity using the same set of components as used on the first day (S10-4.19.4 - Damage to an aircraft) 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.
- 1.3.3.3. 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.
- 1.3.3.4. All aircraft must be equipped with a simple method of sealing the fuel tank when required.

### 1.3.4. **CONTEST NUMBERS:** see 2.2. and 3.2.

### 1.3.5. **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.

### 1.3.6. **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 (S10-4.19.4).

### 1.3.7. **REST DAYS** will only be held on the account of bad weather or unforeseen emergency.

### 1.3.8. **COMPLAINTS AND PROTESTS**

A complaint may be made to the organisers, preferably by the team leader, to request a correction. It should be made with the minimum delay and it will be dealt with expeditiously. If the complainant is not satisfied with the outcome, the team leader may make a protest in writing to the Director or his Deputy. (See Section 10, 4.6.3). The time limit for protests is 12 hours after publication of the provisional task results, except that after the last contest task it is 2 hours. The protest fee is 40 USD.

## 1.4. **FLYING AND SAFETY REGULATIONS**

### 1.4.1. **BRIEFING**

Briefings will be held for team leaders and/or competitors on each flying day. Full task details, met information, flight safety requirements, and details of any prohibited or restricted flying areas will be given in writing, as a minimum, to team leaders. The time and place for briefing meetings and any postponements will be prominently displayed. Briefing may be postponed from the set time in the event of bad weather.

#### 1.4.1.1. Flight safety requirements given at briefing carry the status of regulations.

#### 1.4.1.2. 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.

### 1.4.2. **COMPLIANCE WITH THE LAW**

Each competitor is required to conform to the laws and to the rules of the air of the country in which the championships are held

**1.4.3. PREPARATION FOR FLIGHT**

Each aircraft shall be given a pre-flight check by its pilot and may not be flown unless it is serviceable.

**1.4.4. 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.

**1.4.5. DAMAGE TO A COMPETING AIRCRAFT**

Any damage shall be reported to the Director without delay and the aircraft may then be repaired. Any replacement parts must conform to the original specifications. Change of major parts such as a wing or engine may incur a penalty.

- 1.4.5.1. An aircraft may be replaced by permission of the 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.

**1.4.6. TEST AND OTHER FLYING**

No competitor may take-off during a competition day from the contest site without the permission of the Director. This may be given for a test flight except that 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 is not permitted.

- 1.4.7. Protective equipment: 2.3. and 3.4.1.

**1.4.8. 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 Director before flying.

**1.4.9. AIRFIELD DISCIPLINE**

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

**1.4.10. 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.

- 1.4.10.1. A competitor involved in collision in the air must not continue the flight if the structural integrity of the aircraft is in doubt.

**1.4.11. CLOUD FLYING**

Cloud flying is prohibited and aircraft may not carry gyro instruments or other equipment permitting flight without visual reference to the ground.

**1.4.12. ELECTRONIC APPARATUS:**

- 1.4.12.1. Radios, VOR, GPS and similar electronic navigation aids are prohibited. The normal penalty is disqualification. 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.

**1.4.13. EXTERNAL AID TO COMPETITORS**

Any help in navigation or thermal location by non-competing aircraft, including 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.

**1.5. CHAMPIONSHIP TASKS****1.5.1. GENERAL**

- 1.5.1.1 To count as a 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.
- 1.5.1.2. A task for each class may be different and a task may be set for all classes.

1.5.1.3. A competitor will generally be allowed only one take-off for each task and the task may be flown once only. The conditions of possible restarting with scoring consequences are specified in the Task Description.

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

#### 1.5.1.5. **TASKPERIOD**

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.

#### 1.5.1.6. **TASK SUSPENSION OR CANCELLATION**

The 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.

#### 1.5.1.7. **TYPES OF TASKS**

Only the tasks listed in Annex 4 will be used:

- A. Flight planning, navigation estimated time and speed. No fuel limitation.
- B. Fuel economy, speed range, duration. Fuel limited to 15 kg or less.  
Precision landings, engine off.

### 1.5.2. **FLYING THE TASKS**

1.5.2.1 Any part of a competition task may be flown either

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

The resulting complete task is the combination of the above.

1.5.2.2. Order of take off may be

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

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

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

#### 1.5.2.4. **OUTLANDINGS**

If a pilot lands away from the goal field or from base he must inform the organisers by telephone with the minimum delay and at latest by the closing time of the task. He may fly home or return by road, having obtained evidence of the landing place. On return to base the pilot must report immediately to Control. 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.

#### 1.5.2.5. **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.

#### 1.5.2.6. **EMERGENCIES**

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

### 1.5.3. **CONTROL OF TASK FLIGHTS.**

1.5.3.1. Control of Class conformity: 2.1.2.

1.5.3.2. Control of the performance

- a. Distance measurements: 2.4.2. and 3.4.2.
- b. Timing on airfields and touch and go points: by marshals. At the WMC No data back cameras will be used. All times are given, taken and calculated in local time.
- c. Fuel measurement for tasks with limited fuel: 2.4.1. and 3.4.3.1.

Measured fuel quantities include oil where it is mixed with petrol.

#### 1.5.3.3. Control of Accuracy

- a. Landing accuracy will be verified by video cameras.
- b. Time accuracy will be controlled by Marshals at gates. Gates are
  - Public gates, in declared geographical points of the terrain. The height of crossing will be briefed.
  - Hidden gates, situated on certain sections of the course. The height to be kept along the certain section of the course will be briefed.
- c. Space accuracy will be controlled by control points to be visited. A control point can be
  - A public turn point, which can be
  - A declared geographical point of the terrain,
  - A landing marker,
  - A kicking stick (PPGs),
  - A hidden control point, designated with canvas markers and laid out somewhere onto the course.

Reaching a turn point is verified by photos or by the symbol and position recorded on the task sheet by the competitor or by a Marshall's report. Any special rule will be annexed to the Task Description.

## 1.6. SCORING

### 1.6.1. General

- 1.6.1.1. 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.
- 1.6.1.2. A score given to a competitor shall be expressed to the nearest whole number, 0.5 being rounded up.
- 1.6.1.3. All distances are rounded up to the nearest 0.5 km. All times are taken to hours, minutes and seconds.
- 1.6.1.4. 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
- 1.6.1.5. Deduction of penalty points shall be made after scoring for that task is completed.
- 1.6.1.6. 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.
- 1.6.1.7. The following standard symbols will be used for scoring :  
V = Speed, D = Distance, T = Time
- 1.6.1.8. Score sheets are to be titled with the Championship class, task name, date and time of publication, and shall be marked PROVISIONAL or OFFICIAL. Official score sheets shall be countersigned as such by the competition director.

### 1.6.2. PENALTIES

- 1.6.2.1. In general, any infringement of any flying, safety or task regulation will result in penalty.
- 1.6.2.2. 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 performance enhancing drugs.
  - 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.

## Section 2. Applies to Classic Classes (WSC, WTS, FSC & FTS)

- 2.1. **DEFINITIONS:** see Note 0 and 1.2.1. (Annex 1 to Section 10)
  - 2.1.1. All aircraft will be expected to have a still air range of 250 km.
  - 2.1.2. Control of Class Conformity:
    - 2.1.2.1. At the WMC no minimum speed demonstration will be required. Instead:  
Entrants should obtain a minimum speed declaration for their aircraft. (Section 10, Annex 1) and present it at

Registration.

2.1.2.2. The Organisers may require a weight measurement from any aircraft at any suitable time in the configuration it flew on the first competition day. 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 limit for the class in which it is flown.

2.1.2.3. The penalty for aircraft not capable to take off from within the deck may range up of DSQ according to the task description.

## 2.2. 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, and on the pilot's helmet. Identification may also be required on the fin or rudder. The underside wing number shall be of a colour contrasting background.

## 2.3. 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.

## 2.4. FLIGHT CONTROL

### 2.4.1. FUEL MEASUREMENT

2.4.1.1. The fuel for Classic Classes will be measured by volume. 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.

2.4.1.2. Competitors must be able to demonstrate that their aircraft tanks are empty and that fuel lines are no longer than normal.

### 2.4.2. DISTANCE MEASUREMENTS

Distance will be measured for all competitors on the same official map, of a scale of 1:200 000. Measurement will be made to the nearest 0,5 km.

### 2.4.3. TIMING

Times measured at hidden points (hidden gates) will be considered as correct if the time of crossing falls within the margin declared on the Task Description.

### 2.4.4. SCORING

#### Cross country tasks.

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

$$P = \left( \frac{Q}{Q_{\max}} \times 1000 \right)$$

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

#### Precision landing tasks with engine stopped:

Maximum score 250 points. The score P will be the value of the zone in which the main wheels touch down and remain in contact with the ground. If the aircraft bounces, it will be the lowest value of the zones entered. Touching on a line scores the higher of the two zones

## 2.5. TASKS

2.5.1. The proportion of the score cumulated during the Championships is

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

2.5.2. Competition take-offs and landings shall be completed within a deck of 100 x 25 m, except for emergency provisions given at briefing. Failure to comply results in penalty.

Preparing for the flight, taking off, flying the task, landing, reporting and scoring together with the penalties will be specified in the Task Description.

## 2.6. WINNING



The winner of each class shall be the pilot or crew 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 in each task in the classic classes. 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.

## **Section 3: Applies to class PPG**

### **3.1. DEFINITIONS**

3.1.1. A powered paraglider (PPG) is a foot launched one or two seat aeroplane with flying surfaces which have no rigid structure. See Annex 1 to Sporting Code, Section 10)

A PPG must be demonstrably capable of being safely foot launched from a horizontal surface in still air or light wind conditions. Take-off may start with the canopy laid out on the ground.

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

The PPG shall be flown solo.

### **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 to Pilots or any part of their PPG's touching 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. 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.

#### **3.3.2. PROHIBITED EQUIPMENT**

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

### **3.4. FLIGHT CONTROL**

#### **3.4.1. TIMINGS**

3.4.1.1. Normally, take-off times are taken at the moment a pilot's feet leave the ground.

3.4.1.2. Normally, landing times are taken at the moment a pilot's feet or any other part of the pilot or PPG touch the ground.

3.4.1.3. Timings may also be taken when the pilot kicks a stick or flies overhead an observer as briefed for the task in question.

3.4.1.4. 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.

3.4.1.5. 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 not smaller than 1:100 000. Measurement will be made to the nearest 0.5 km.

#### 3.4.3. **FUEL MEASUREMENT**

3.4.3.1. 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.

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

#### 3.4.4. **FLIGHT ACCURACY MEASUREMENT**

##### 3.4.4.1. Ground 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.

##### 3.4.4.2. 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 metres, 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 (eg 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**

The proportion of the scores accumulated during the Championships is approximately

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

##### 3.5.1. **TAKE-OFF**

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

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

3.5.1.3. 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.

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

3.5.1.5. 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.

##### 3.5.1.6. **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 Director, until the moment the competitor leaves the deck having finished a task, or otherwise lands according to the outlanding rules.

3.5.1.7. 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.

3.5.1.8. 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.

### 3.5.2. **FLIGHT LIMITATIONS**

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

### 3.5.3. **LANDING**

- 3.5.3.1. 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. The pilot may be liable to penalty if he or any part of his PPG touches the ground outside the deck before he has removed his harness.

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.

- 3.5.3.2. 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.

- 3.5.3.3. 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."

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."

- 3.5.3.4. 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.

### 3.5.4. **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 organisation 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:

$$P = \left( \frac{Q}{Q_{\max}} \times 1000 \right)$$

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.

$$\text{E.g.: } P = \left( \frac{Q}{Q_{\max}} \times 750 \right) + y \quad (\text{where the maximum value of } y \text{ would be } 250)$$

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

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

- 3.6.3. The PPG team prize is computed from the sum of the scores of the top 3 pilots of each country in 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.

Entry Form  
for the European Microlight Championships  
23-31 July, Matkopuszta Airport, Hungary

Name of NAeC:.....

Address:.....

Tel:.....Fax..... e-mail:.....

We wish to enter the Microlight Team:

number of aircraft:      WSC: .... WTS:..... FSC:..... FTS:..... PPG:...

staff :                      ACC:..... TLD ....

Key:

WSC: Flexwing Solo Class; WTS: Flexwing Two Seater Class; FSC: Fixed Wing Solo Class; FTS Fixed Wing Two Seater Class; PPG: Powered Paraglider Class; ACC: accompanying persons; TLD: Team leaders

Signature:.....Position in NAeC.....

Contact fax/e-mail:.....

Note:

1. The Championships are open to all Member and Associated Member countries of the FAI who may enter any number of aircraft not exceeding 20 and not more than 6 in any Class.
2. All pilots should possess a valid pilot licence and desirably, have fulfilled the basic conditions of the Silver Colibri Badge (flew and logged four times over a pre-planned 150 km distance), and competed in at least one National Championship.
3. Entry Fee is 300 USD for pilot and co-pilot, 100 USD for TLD Team Leaders and ACC accompanying persons. Entry fee includes
  - Competition circumstances (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.

Entry fee is to be transferred to

Beneficiary's name:      Ordody C&C Kft  
Beneficiary's address:    H-1027 Budapest, Margit krt. 1., Hungary  
Town and country:            Budapest, Hungary  
Beneficiary's account no: 11702036-20634483  
SWIFT Code:                OTPVHUBH  
Beneficiary's bank name: NATIONAL SAVINGS BANK  
Beneficiary's bank address: H-1023 Budapest, Frankel Leo u. 21-23,

4. Each team shall nominate a Jury member for the Classic Classes and for the PPG Class, which may be the same person. The nominee must be an experienced competition pilot and if possible Jury or competition organising experience in FAI airports discipline, but preferably in microlights.
5. Accommodation needs should be annexed to the Entry form.  
  
Possibilities will be published in BULLETIN 1, enquiries will be answered in BULLETIN 2 before 30 May. The fee of camping on the airport is included in the entry fee, for the use of the common sanitary instalments a fee may be required
6. Deadline of returning this Entry Form is 30th May.  
either via e-mail: Marton Ordody <ordody@mail.mata.vu.hu>, together with a report on the entry fee transfer, or via fax: 00 36 1239 4458 together with a copy of the entry fee bank transfer.
7. Planned accommodation:

## Catalogue of tasks

### 1. Precision takeoff and landing

### PRECISION

#### Objective

To make a clean take off at the first attempt in the deck, and subsequently land as near as possible to a point.

#### Description

The pilot is permitted four takeoff attempts, climbs to 500ft overhead the target, cuts the engine before passing through a gate and tries to make a first touch as near as possible to the centre of a target consisting of a series of concentric circles.

#### Special rules

The pilot scores 250 points for a clean take off at the first attempt, 170 for the second, 90 for the third, zero for the fourth.

The circuit to be flown will be detailed at briefing.

The first touch of the ground by the pilot's foot is the point from which the pilot's score will be derived. A first touch on the line scores the higher score.

Contestants will be awarded a zero score for:

- The pilot or any part of the aircraft touching the ground outside the deck while undertaking the task.

Contestants will be awarded a zero *landing* score for:

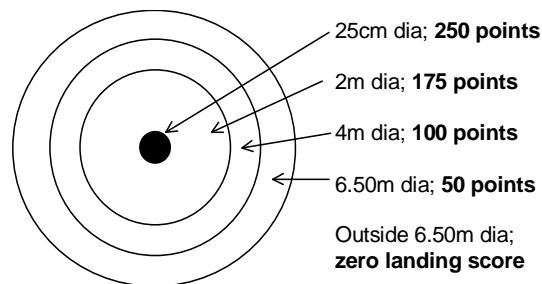
- Engine not stopped before the gate.
- Gate not passed correctly.
- Falling over as a result of the landing.

#### Scoring

Pilot score = (Bto + Bld)

Where:

Bto = Takeoff points, Bld = Landing points



### 2. Precision circuit in the shortest time

### PRECISION

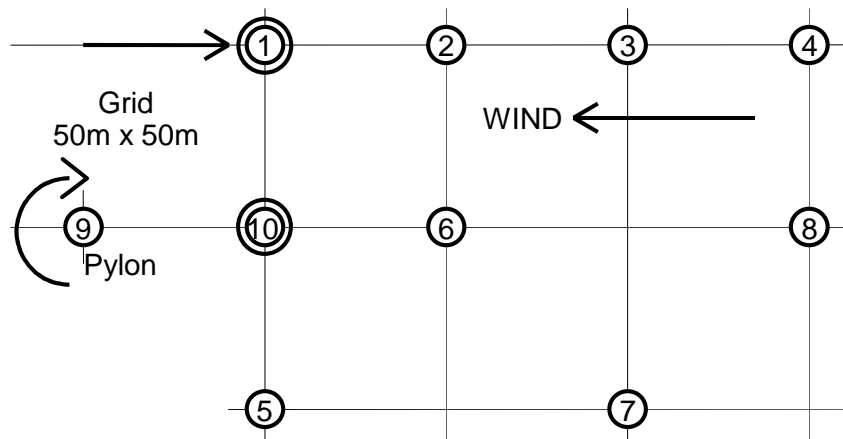
#### Objective

To strike a number of targets laid out in a given order in the shortest possible time and return to the deck.

#### Description

8 targets 2m in height are laid out 50M apart in two arrays. The first array has 4 targets in a straight line, the second array has 4 targets in a slalom.

A further target is placed 50M behind target 10 to serve as a pylon which must be flown round (by the body of the pilot) before target 10 is struck.



#### Special rules

A valid strike on a target is one where the pilot or any part of the FLM has been clearly observed to touch it. To count as a strike, target No. 9, the pylon, must be rounded in a CLOCKWISE direction.

A strike on target 1 starts the clock, a strike on target 10 stops the clock.

Pilots may have only one attempt at striking each target except for the first and last targets where three attempts at each are permitted.

Failure to strike the first or last target or touch the ground at any point between them: score zero.

## Scoring

$$Q = \frac{NQ^3}{Sp}$$

$$\text{Pilot Score} = \left( 1000 \times \frac{Q}{Q_{\max}} \right)$$

Where:

$NQ$  = The number of targets struck by the pilot

$Sp$  = The pilot's elapsed time in seconds between striking target 1 and target 10

---

## 3. Slow / fast speed

## PRECISION

### Objective

To fly a course as fast as possible and then return along the course as slow as possible.

### Description

A straight course between 250m and 500m long and 25m wide is laid out with gates at each end.

The pilot makes a timed pass along the course as fast as possible, returns to the start, and makes a second timed pass in the same direction as slow as possible.

### Special rules

For each leg, the clock starts the moment the pilot passes the first gate and stops the moment he passes the second.

If the pilot or any part of his PPG touches the ground during the first leg:  $VP_1 = \text{zero}$  and  $EP = \text{zero}$

If the pilot or any part of his PPG touches the ground during the second leg:  $VP_2 = \text{zero}$  and  $EP = \text{zero}$

If the pilot zigzags or if the body of the pilot overflies a side of the course or exceeds 2m above ground: Score zero.

The maximum time allowed for a pilot to complete each leg of the course is 5 minutes.

$$\text{Pilot score} = \left( 125 \times \frac{Vp_1}{V_{\max}} \right) + \left( 125 \times \frac{V_{\min}}{Vp_2} \right) + \left( 250 \times \frac{Ep}{E_{\max}} \right)$$

Where:

$V_{\max}$  = The highest speed achieved in the task, in Km/H

$Vp_1$  = The speed of the pilot in Km/H in the first leg of the task

$V_{\min}$  = The lowest speed achieved in the task, in Km/H

$Vp_2$  = The speed of the pilot in Km/H in the second leg of the task

$Ep$  = The difference between the pilot's slowest and fastest speeds, in Km/H

$E_{\max}$  = The maximum difference between slowest and fastest speeds, in Km/H

---

## 4. Pure Economy

## ECONOMY

### Objective

Take-off with a measured quantity of fuel and stay airborne for as long as possible and return to the deck.

### Special rules

Free take-off within the time window.

Departure from view of the marshals or egress from the permitted flight area will incur penalties.

Land outside the airfield boundary: Score zero. Land inside the airfield boundary but outside the deck: 20% penalty.

### Scoring

$$\text{Pilot score} = 1000 \times \frac{Tp}{T_{\max}}$$

Where:

$Tp$  = The pilot's time,

$T_{\max}$  = The longest time taken to complete the task

---

## 5. Economy & distance

## ECONOMY

### Objective

To take off from the deck with a given quantity of fuel, fly as many laps as possible around a course not exceeding 1Km in length and land on another deck.

### Special rules

Pilots must not exceed 200ft height at any time, or 30ft whilst rounding pylons.

Exceeding the height limitations or failure to round a pylon does not score that lap.

If the pilot or any part of his PPG touches the ground during the task and takes off again, score zero.

Failure to land in the landing deck: 20% penalty.

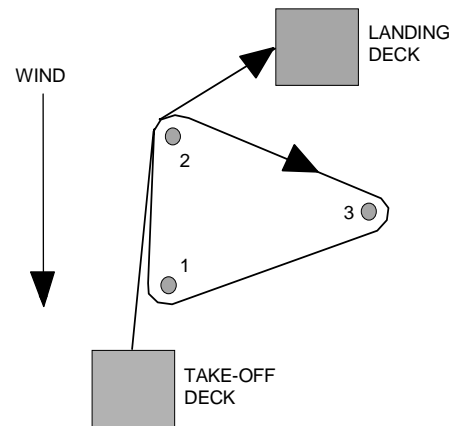
### Scoring

$$\text{Pilot score} = 1000 \times \frac{L_p}{L_{\max}}$$

Where:

$L_p$  = The number of whole laps completed by the pilot

$L_{\max}$  = The maximum number of whole laps achieved in the task.



---

## 6. Economy & Navigation.

## ECONOMY

### Objective

To take off with a given quantity of fuel and locate an unknown number of markers within defined sectors and return to the deck.

### Description

Each sector will contain a given IP (initial point) and a FP (finishing point) which may be a turn point, marker or gate. The pilot flies a given track between the IP and FP. An unknown number of markers may be distributed along the track.

### Special rules

Outlanding: Score zero.

### Scoring

$$\text{Pilot score} = 1000 \times \frac{NB_p}{NB_{\max}}$$

Where:

$NB_p$  = The number of ground markers and/or turn points a pilot collects in the task

$NB_{\max}$  = The maximum number of markers and/or turn points collected in the task

---

## 7. Economy & precision

## ECONOMY

### Objective

To make a clean take-off in the time window with a given quantity of fuel, stay airborne as long as possible within a defined area and land on landing markers situated within the deck before the end of the time window.

### Special rules

The pilot scores 300 bonus points for a clean take off at the first attempt, 200 for the second, 100 for the third, zero for any attempts thereafter.

Departure from view of the marshals or egress from the permitted flight area will incur penalties.

When landing, If the pilot elects to switch off his engine at least 5m above a marker and:

- Makes a first touch on the marker: Landing bonus: 200 points

If the pilot elects to not switch off his engine and:

- Makes a first touch on the marker: Landing bonus: 50 points

If the pilot falls over as a result of the landing: zero landing bonus.

If the pilot obstructs another competitor attempting to land at a landing marker penalties will apply.



## Scoring

$$\text{Pilot score} = \left( 500 \times \frac{Tp}{T_{\max}} \right) + Bto + Bld$$

Where:

*TP* = The pilot's time

*Tmax* = The longest time taken to complete the task

*Bto* = Takeoff bonus points

*Bld* = Landing bonus points

## **8. Pure Navigation**

### Objective

To fly a course between as many turn points or markers as possible within the time window and return to the deck.

### Scoring

$$\text{Pilot score} = 1000 \times \frac{NBp}{NB_{\max}}$$

Where:

*NBp* = The number of ground markers and/or turn points a pilot collects in a task

*NBmax* = The maximum number of markers and/or turn points collected in the task

## **9. Navigation, precision & speed**

### Objective

To make a clean take-off from the deck, to fly a course between as many turn points or markers as possible within a given time, and to collect bonus points for landing at designated markers before returning to the deck.

### Special rules

The clock starts the moment the marshal makes the signal to take off.

At the start, the pilot scores 300 bonus points for a clean take off at the first attempt, 200 for the second, 100 for the third, zero for any attempts thereafter.

In the case of landing markers, If the pilot elects to switch off his engine at least 5m above the marker and:

- Makes a first touch on the marker: Landing bonus: 200 points
- Misses the marker: landing bonus: 50 points

If the pilot elects to not switch off his engine and:

- Makes a first touch on the marker: Landing bonus: 100 points

If the pilot falls over as a result of a landing: zero landing bonus for that landing.

If the pilot obstructs another competitor attempting to land at a landing marker penalties will apply.

The clock stops the moment the pilot either crosses a line or lands back on the deck.

Any outside assistance: Score zero.

### Scoring

$$\text{Pilot score} = \left( 500 \times \frac{NBp}{NB_{\max}} \right) + Bto + \left( 200 \times \frac{Bld}{Bld_{\max}} \right)$$

Where:

*NBp* = The number of ground markers and/or turn points a pilot collects in the task

*NBmax* = The maximum number of markers and/or turn points collected in the task

*Bto* = Pilot's takeoff bonus points

*Bld* = Pilot's landing bonus points

*BldMax* = The maximum landing bonus points achieved.

## **10. Navigation / estimated speed**

### Objective

To fly a course between any combination of turn points, markers and gates as defined at the briefing having declared estimated flight times or estimated times of arrival as required at the briefing, and return to the deck.

### Special rules

The value of T, in seconds, will be given at the briefing.

## Scoring

$$\text{Pilot score} = \left( 700 \times \frac{\text{NBp}}{\text{NBMax}} \right) + (300 - T)$$

Where:

*NBp* = The number of ground markers and/or turn points a pilot collects in the task

*NBmax* = The maximum number of markers and/or turn points collected in the task

*T* = The total difference in between pilot's estimated and actual times for all timed sectors. ( $\geq 300 = 300$ )

---

## 11. Navigation / estimated speed / precision

### Objective

To fly a course between any combination of turn points, markers, landing markers and gates as defined at the briefing having declared estimated flight times as required at the briefing, and return to the deck.

### Special rules

The value of *T*, in seconds, will be given at the briefing.

At the start, the pilot scores 150 bonus points for a clean take off at the first attempt, 100 for the second, 50 for the third, zero for any attempts thereafter.

In the case of landing markers, If the pilot elects to switch off his engine at least 5m above the marker and:

- Makes a first touch on the marker: Landing bonus: 100 points
- Misses the marker: landing bonus: 25 points

If the pilot elects to not switch off his engine and:

- Makes a first touch on the marker: Landing bonus: 50 points

If the pilot falls over as a result of a landing: zero landing bonus for that landing.

If the pilot obstructs another competitor attempting to land at a landing marker penalties will apply.

### Scoring

$$\text{Pilot score} = \left( 500 \times \frac{\text{NBp}}{\text{NBMax}} \right) + (250 - T) + \frac{\text{Bld}}{\text{BMax}}$$

Where:

*NBp* = The number of ground markers and/or turn points a pilot collects in the task

*NBmax* = The maximum number of markers and/or turn points collected in the task

*T* = The total difference in between pilot's estimated and actual times for all timed sectors. ( $\geq 250 = 250$ )

*Tsmax* = The number of timed sectors set in the task

*Bto* = Pilot's takeoff bonus points

*Bld* = Pilot's landing bonus points

*Bmax* = The number of landing markers set in a task.

---

## 12 Speed triangle and out and return

### Objective

With limited fuel, to fly around a circuit in the shortest possible time, return to the deck, and then, with the pilots remaining fuel fly in a given direction as far as possible and return to the deck.

### Description

Fuel quantity allowed: (Suggested: 6 litres)

Part 1: Speed; The pilot take off time is noted. The pilot flies to one or more turnpoints and returns to the deck where he is timed.

Part 2: Distance; The pilot then flies in a given direction to a point of pilot choice, photographs it, and returns to the deck.

### Special rules

- Land out before completing part 1: Score zero.
- Land out before completing part 2: Score zero for part 2.
- IMPORTANT: The point the pilot photographs as his point of greatest distance in part 2 **MUST** be clearly and unequivocally interpretable onto the official map. It is recommended the pilot takes several views of the point to confirm his position in relation to surrounding features and also takes back-up photos of earlier points along his route.
- Failure to takeoff or land entirely in the deck: 20% penalty.

## Scoring

$$\text{Pilot score} = \left( 500 \times \frac{t_{\text{Min}}}{t_p} \right) + \left( 500 \times \frac{d_p}{d_{\text{Max}}} \right)$$

### Where:

$t_p$  = the pilot's time,

$t_{\text{Min}}$  = The best time (Part 1)

$d_p$  = the pilot's distance

$d_{\text{Max}}$  = the greatest distance (Part 2)

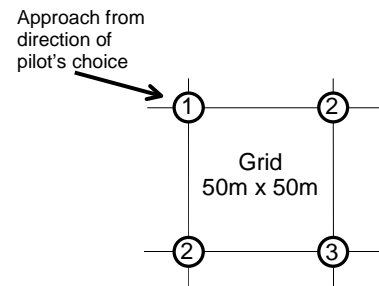
---

## 13 THE FOUR STICKS

### Objective

This task is intended as a small break task between elements of an overall task.

There are 4 standard kicking sticks set at the corners of a 50m x 50m square. The pilot must kick 3 of the 4 sticks. The first stick the pilot kicks may be any of the 4 sticks. The third stick the pilot kicks must be diagonally opposite the first, the second stick may be either of the two other sticks.



### Special rules

- If this task is used to take a time for the purposes of an element of the overall task then the time shall be taken the moment the pilot strikes the first stick.
- The pilot may have as many attempts as necessary at striking the first stick.
- Only ONE attempt is allowed at kicking both the second and third sticks.
- There shall be one group of 4 sticks for every 15 competitors in the task.
- On approach to the task, pilots should choose a "free" group of sticks, however if, in the opinion of the marshals on duty a conflict with another aircraft existed (depending on the overall task, for example if there is a timing involved) both should kick only one stick and then depart on the rest of the overall task. Both pilots will then be given the opportunity to have ONE further attempt at this task as soon as possible after the end of the overall task.

### Scoring

The scoring should be integrated into the overall task as *NQ*. If the pilot fails to kick either the second or third stick then for each stick then the penalty shall be no more than 5% of the overall task score.

## Noise tasks

As Competitors should know, CIMA has decided to introduce a "noise" element to Microlight and PPG competitions. It is intended that one task from the catalogue should be run in a Championship, but as this is the first year this has been tried, the tasks are experimental and therefore the scoring will **not** be included in the overall individual or team scores.

The PPG Director intends to run a noise task at some stage during the championship week.

---

## 14 Noise in climb

### Objective

From a stationary position on the ground in front of a line and using a fixed throttle (and propeller pitch) setting of pilot choice, the pilot takes off and climbs in a straight line over a microphone set 300m distant from the line. The max noise in dBA of the aircraft is measured.

### Special rules

Weaving, failure to fly directly over the microphone, changing throttle or propeller pitch setting: Zero score.

## Scoring

$$\text{Pilot score} = 500 \times \left( \frac{n\text{Min}}{nP} \right)$$

### **Where:**

$n\text{Min}$  = The minimum noise in dBA achieved in the class

$nP$  = The noise achieved by the pilot in dBA

---

## **15 Minimum Noise in level flight**

### Objective

To fly two legs of a course in opposite directions as quietly as possible.

### Description

The course is between two points 300m apart and must be flown in a straight line at a height of 25ft ( $\pm$  10ft). at a pilot selected constant throttle and propeller pitch setting. The microphone is positioned 100m offset from the centreline and equidistant from the two points.

### Special rules

Weaving, changing height, throttle or propeller pitch setting whilst in the course: Zero score for that run.

### Scoring

$$\text{Pilot score} = \left( 250 \times \left( \frac{n\text{Min}_1}{nP_1} \right) \right) + \left( 250 \times \left( \frac{n\text{Min}_2}{nP_2} \right) \right)$$

### **Where:**

$n\text{Min}_1$  and  $n\text{Min}_2$  = The minimum noise in dBA achieved on each run in the class

$nP_1$  and  $nP_2$  = The noise achieved by the pilot in dBA on each run