



# II WORLD AIR GAMES MICROLIGHTS CHAMPIONSHIP

# VIII WORLD MICROLIGHTS CHAMPIONSHIP



# II WORLD PPG CHAMPIONSHIP



**BEAS DE SEGURA, ANDALUCIA, SPAIN**  
June 22 – July 2, 2001

# BULLETIN 1 & LOCAL REGULATIONS

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# BULLETIN No. 1

## CLASSIC CLASSES CHAMPIONSHIPS

The Classic Classes championship will be based at Beas de Segura airfield. This is a splendid facility with 2 tarmac runways and all-new terminal buildings, hangars and camp site facilities.

The championship will be run on traditional lines but in contrast to recent years the Director (Eduardo Marchesi, dir. WMC 1992) will be making a special effort to ensure all pilots get plenty of flying in the competition week.

Special attention is being directed at the planning and management of potentially time-consuming non-flying operations such as fuel control. The organizers can do only so much however, the remaining responsibility lies firmly with the pilots in as much that they must come to the championships properly equipped with aircraft which meet the fuel system specifications laid out in the local regulations.

It is evident that the more tasks which are flown, the more pilots are genuinely able to demonstrate their skills and proficiency as Microlight pilots. This is logistically difficult due to the large numbers of pilots expected, and, even with two decks, the time it takes to physically get them off the ground.

Consequently the director will be introducing into this championship the concept of "Multitask flights" where up to three totally different and/or separate tasks may be set for a single flight. The start and end points of each task will be clearly described in the task briefing. Multitask flights will inevitably be quite long and pilots are strongly advised to ensure that their aircraft are genuinely capable of a range of 250 Km in still air and not just at their most economical speed.

The expected daily schedule will be to perform a long flight for all classes in the morning (multitask or not). The afternoons and evenings will be spent doing duration and precision tasks in groups divided by class. This means that all pilots are likely to have one or two free afternoon/evening periods.

The region surrounding Beas de Segura is quite densely populated with Olive trees. There are plenty of places for emergency landings but it is not an area for very low-level flight. In their preparations for the championships pilots are requested to pay special attention to ensuring their aircraft will be reliable.

Further information will be made available on the web site <http://www.flymicro.com/wag2001>. All teams and pilots are requested to check it frequently for updates.

## PPG CHAMPIONSHIPS

The PPG championships are intended to be quite unlike any previous microlight championship. Pilots will still be doing the same number and types of task as in previous years, but not round and round in circles, instead we will be usually be landing at a new site some 30 – 70 Km distant by road each day. This gives us the opportunity to present our sport to the public and media in a way that has never before been possible.

On one day, for example, we plan to run a task *inside* the 65,000 seat Olympic stadium in Seville!

This "moving" type of championships, although it promises to be a much more interesting challenge for pilots, also presents logistical problems for pilots for which they will have to be prepared. It is very important that aircraft are brought to the event equipped with sufficient fuel capacity to fly 100 Km in still air. Also the organization does NOT intend to provide recovery services from outlandings or transportation for pilot equipment between sites. This is a job for each team.

In principle everything starts off at Beas de Segura. Then, just before the opening ceremony in Seville we all move to Cordoba. Thereafter the championships moves most days, passing through Sevilla, it finally ends up on the beach at Sanlucar de Barramunda. The terrain varies from quite rugged hills around Cordoba to rice paddies near the coast.

A "fly-book" for pilots and team supporters containing the schedule and detailed information about each site and local facilities will be made available on or before 1 April 2001 on the web site <http://www.flymicro.com/wag2001>

## **MEDIA**

Both championships will be making a special effort to present our sport to the public and media. One essential ingredient is that the organizers must collect as much information about all competitors as early as possible. Experience tells us that pilot registration a day or two before the start **is too late!** To this end all prospective team members are invited to enter their details on a pre-registration web site. This is <http://www.flymicro.com/wag2001/enter> . Some information entered here will be made available on a public web site for use by anyone who needs the information, the rest will be used to speed pilot registration before the championships. This is in everybody's interest and a small discount may be available at pilot registration for people who have entered 100% correct information.

## **PLANNING CHECKLIST**

### **EVERYBODY**

- Pre-register all prospective team members at <http://www.flymicro.com/wag2001/enter> Now. There may be a discount at pilot registration for correctly entered information!
- Avoid a surcharge! Make sure your entry fees are paid before 31 March 2001

### **CLASSIC CLASSES**

- Make sure your fuel system complies with the correct specification (Local regs 2.2.1)
- Make sure your aircraft can carry enough fuel to travel 250 Km in no wind – not just at the most economical speed – and still comply with the definition of a microlight!

### **PPG**

- Make sure your aircraft can carry enough fuel to travel 100 Km in no wind – not just at the most economical speed.
- Consider your arrangements for team support and equipment transportation between sites.

*In the meantime, Happy flying, we will see you in the sun in June!*

*Eduardo Marchesi & Richard Meredith-Hardy, 30 Nov 2000*

# LOCAL REGULATIONS

## FOR THE II WORLD AIR GAMES MICROLIGHT CHAMPIONSHIPS

Beas de Segura, Spain, 18 June – 1 July 2001

**ORGANIZED BY: REAL FEDERACIÓN AERONÁUTICA ESPAÑOLA (FAE)  
&  
2001 ECO (ESPAÑA COMITÉ ORGANIZADOR)**

**ON BEHALF OF THE FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE**

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**Official Web Site: <http://www.flymicro.com/wag2001>**

### **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

Note however that it was agreed at the CIMA meeting 2000 that S10 paragraphs 5.8.1 (status of evidence, so that Flight recorders may be used) and 5.8.4 (PPG only, photo sector) are suspended for 2001.

### **CLARIFICATION**

Note: Microlight aircraft Sub-classes AL1, AL2, WL1 and WL 2 are " Classic classes". Microlight aircraft Sub-class PF1 is "PPG"

Sidebar indicates differences to S10 Annexes 3 & 4 (2001 edition) as accepted at the CIMA meeting 2000

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## Part 1, Applies to All Sub-classes

### 1 PART FOR ALL SUB CLASSES

#### 1.1 GENERAL

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

#### 1.2 PROGRAMME DATES

##### 1.2.1 CLASSIC CLASSES

Training, aircraft inspection, registration:	Mon 18 June – Fri 22 June, Beas de Segura.
Opening Ceremony (WAG 2001):	Sat 23 June, Olympic Stadium, Seville.
First Competition briefing:	Sun 24 June, Beas de Segura
Contest Flying Days	Sun 24 June to Sat 30 June, Beas de Segura
Prize-giving	Sat 30 June, Beas de Segura
Closing Ceremony (WAG 2001)	Sun 1 July, Jerez Motor Racing Circuit

##### 1.2.2 PPG

Training, aircraft inspection, registration:	Mon 18 June – Fri 22 June, Beas de Segura.
First Competition briefing:	17:00 Fri 22 June, Beas de Segura.
Opening Ceremony:	Sat 23 June, Olympic Stadium, Seville.
Contest Flying Days:	Sun 24 June, Cordoba
	And at various sites* finishing:
	Sat 30 June, Sanlucar de Barrameda
Prize-giving:	Sat 30 June, Sanlucar de Barrameda
Closing Ceremony:	Sun 1 July, Jerez Motor Racing Circuit

\* Flying day schedule is at <http://www.flymicro.com/wag2001>

#### 1.3 OFFICIALS

##### 1.3.1 CLASSIC CLASSES

Director:	Eduardo Marchesi (ESP) <a href="mailto:emarch@eurosmc.com">emarch@eurosmc.com</a> Tel: +34-91- 8498980 (Office), +34-91-5341716 (Home), +34-609 779209 (Cellular). Fax:+34-91-8512553
Deputy Director:	Fernando del Rio (ESP) <a href="mailto:ferdelrio@teleline.es">ferdelrio@teleline.es</a>
International Jury:	President: Miroslaw Rodzewicz (POL) <a href="mailto:miro@meil.pw.edu.pl">miro@meil.pw.edu.pl</a> Gerhard Gerech (LUX) <a href="mailto:gerhard_gerech@yahoo.com">gerhard_gerech@yahoo.com</a> Tomas Backman (SWE) <a href="mailto:tomas.mksak@swipnet.se">tomas.mksak@swipnet.se</a>
Stewards:	Ann Welch (GBR) <a href="mailto:annwelch@aol.com">annwelch@aol.com</a> Kevin Rutland (GBR) <a href="mailto:Kev3031@aol.com">Kev3031@aol.com</a>

**1.3.2 PPG**

Director: Richard Meredith-Hardy (GBR) rmh@flymicro.com  
Deputy Director (logistics): Paco BURGOS (ESP) pburgos@arrakis.es  
Deputy Director (marshals): Paco GUERRA (ESP) c/o jackieb@arrakis.es  
International Jury: President: Jean Pierre POULEAU (FRA)  
jean-pierre.pouleau@wanadoo.fr  
Marton ORDODY (HUN) ordody@mail.mata.v.hu  
Tom GUNNARSON (USA) tomusua@aol.com  
Stewards: Alain Blanchot (FRA)

**1.4 ENTRY**

The Championships are open to all Active Member and Associate Member countries of FAI who may enter up to 5 pilots in each classic class and up to 6 pilots in the PPG class.

- Entries must be made on the official Entry Form.

The entry fee is:

- 450 Euros for each pilot
- 350 Euros for each co-pilot / navigator and the team Leader
- 300 Euros for each assistant or technical official

Late Entry Fees:

- Entry Fees paid between 1 April and 30 April 2001: 10% surcharge
- Entry Fees paid between 1 May and 31 May 2001: 15% surcharge
- Entry Fees paid after 1 June 2001: 25% surcharge
- If applications, with fees paid, are not received by 15 June 2001, the entry may be refused.

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 airfields and free entry to all official events, free transportation by bus to the WAG 2001 opening ceremony in Seville, and to the Closing Ceremony in Jerez de la Fronteira.
- Camping site at the airfields with water, toilets and showers
- (Beas de Segura only) Headquarters tent for each team with electricity.

The entry fee is to be transferred before March 31, 2001 to a Bank and account to be notified in Bulletin No. 2 by the 2001 ECO.

**1.5 INSURANCE**

Before the aircraft is flown, documentary proof must be presented to the organisers at registration.

- All competing aircraft must have a Certificate of Insurance against Third Party Liability, valid in Spain, covering a minimum limit of 300,000 Euros.
- Each competitor must have a Personal Certificate of Insurance against Third Party Liability, valid in Spain, covering a minimum limit of 300,000 Euros. The organizer will offer insurance services for those competitors who do not have sufficient coverage.
- Each competitor must be a holder of a Personal Sporting Accident Health Insurance Policy, valid in Spain, with a reasonable coverage.

Further information will be provided in Bulletin 2.

## **1.6 LANGUAGE**

The official languages of the Championships are English and Spanish.

## **1.7 MEDALS AND PRIZES**

FAI medals will be awarded to:

- Pilots placed first, second and third in each sub-class.
- National teams placed first, second and third in the classic and in the PPG Sub-classes.
- FAI Diplomas will be awarded for those placed first to tenth.

Trophies will be also awarded for:

- The manufacturers championship (Classic classes and PPG)
- The best female crew (Classic classes)

See local regulations, Annex 1

## **1.8 CHAMPIONSHIP SUB-CLASSES**

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

### **WL1, WL2, AL1, AL2 and PF1**

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

### **1.8.1 SUB-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 sub-class, with entry fees paid.

### **1.8.2 CHAMPIONSHIP VALIDITY**

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

## **1.9 GENERAL COMPETITION RULES**

### **1.9.1 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 License and qualifications
- Evidence of competitor's nationality
- Valid FAI Sporting License for pilot and navigator
- Aircraft Certificate of Airworthiness or Permit to Fly and minimum speed declaration
- Evidence of conformity to sub-class rules
- Certificate of 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 navigator must have reached the age of 14 years.

Where a pilot or crew member is under 18 years of age on Monday 18 June 2001, a pilot or crew member will not be able to participate in the World Air Games unless the organizers have been

provided with a written authorization from the participant's parent or legal guardian (See Local regulations Annex 2 for authorization form)

### **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 organizers. 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 organizers have the right to inspect for sub-class conformity and airworthiness and, if necessary, ground any aircraft for safety reasons at any time during the event.

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 organizers 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 sub-class nor change their aircraft (S10 Chapter 4, 4.19.4).

### **1.9.6 REST DAYS**

No rest days are expected during these championships.

### **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 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 1.6.1.8) If he 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 75 USD

## **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.

Procedures for flight preparation, takeoff, flying the task, landing and scoring together with any penalties will be specified in each task description. (S10 Chapter4, 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 country in which the championships are held. (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 maneuver hazardous to other competitors or the public shall be avoided. Unauthorized aerobatics are prohibited. (S10 Chapter 4, 4.19.2)

**1.10.5 DAMAGE TO A COMPETING AIRCRAFT**

Any damage shall be reported to the organizers 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 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 sub-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 Director. Permission may be given for a test flight but if the task for that sub-class has started the pilot must land and make a competition take-off on the task. Practicing prior to a task is not permitted. (S10 Chapter 4, 4.21)

Due to the nature of Beas de Segura airfield where only one runway will be in use at any one time, special safety arrangements will be active during training and non competition days.

- The airfield will be a strictly controlled airspace at all times. All take-off, traffic patterns and landings must be made strictly according to briefing.
- Practice engine-out landings and precision deck landings will only be allowed at designated times. These periods will be controlled by marshals and pilots must stick rigidly to their instructions.
- Failure to comply with these important safety rules will imply that the pilot's registration in the Championship will no longer be accepted and the pilot will be expelled from the Airfield.

**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 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 organizer or the organizer's national authority.
- Anti doping control will be carried out in accordance with Spanish law. (Sports law 10/1990, October 15, chapter VIII) All relevant information can be found on the FAI Web site: [www.fai.org/medical](http://www.fai.org/medical)

**1.10.8 AIRFIELD DISCIPLINE**

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

**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. 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)

A "sealed container" is a solid, rigid, opaque box, which must be able to be sealed using steel wire and a lead seal. Misuse of this rule may result in disqualification.

GNSS flight recorders are permitted so long as it is satisfactorily demonstrated that the pilot or crew has no possible in-flight access to any information it may be capable of displaying, e.g. by sealing the display or securing it inside a sealed opaque container.

Before each task the 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 competing aircraft not carrying out the task of their own sub-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)

## **1.11 CHAMPIONSHIP TASKS**

### **1.11.1 GENERAL**

To count as a valid championship task all competitors in the sub-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 sub-class may be different and a task may be set for all sub-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 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.

#### **1.11.1.1 MULTITASK FLIGHTS**

Up to three tasks may be set in the same flight, in this case clear information will be provided describing the start and finishing points of each task.

#### **1.11.1.2 SPLITTING OF TASKS**

A precision task in a single class may be scheduled to run in separate periods with similar weather conditions, possibly on different days or in different locations, or both.

Normally team managers will be required before the start of the task to divide their teams into equal sized groups and nominate a different task period for each group. Once the task has started, nominations may not be altered.

Exceptionally, for safety reasons and by prior agreement with the International Jury, the director may define the split based on some other criteria e.g. current championship standing.

#### **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 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 sub-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, fuel consumption, estimated time and speed. 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 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.

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.

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, 4.28.1)

### 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, 4.29.1)

### 1.11.8 EMERGENCIES

A competitor landing to help an injured pilot should not, at the discretion of the 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.

Data back cameras will NOT be used for time calculation.

### 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 it's timing will be by Marshals report. The only aircraft identification system that will be used is CONTEST NUMBER.

Control points may be: A geographical point, a ground marker, a landing marker (PF's) or a kicking stick (PF's)

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
- by the competitor recording the symbol and position on the declaration sheet
- by a Marshall's report.
- by flight recorder evidence.(Secondary evidence only)

The precise requirements will be described in the Task Description.

If the pilot fails to provide satisfactory or correct evidence according to the requirements above but has GNSS flight recorder evidence, and proof the flight recorder was physically in the aircraft in question, then, at the discretion of the competition director, this may be used as an alternative form of proof.

### 1.12.5 PHOTOGRAPHIC EVIDENCE

The camera must be of focal length between 30-60 mm and take 35mm film that will be provided by the organizer.

Cameras with any type of zoom, or the ability to alter the photograph order, will not be permitted.

All the cameras that will be used in the championship must be inspected approved and identified by the organizers.

No films coming from a non-identified camera will be taken as evidence.

A film used for evidence must remain uncut.

Two cameras may be used but only one film will be used to verify the flight. Both films shall be handed in after landing, marked 1 and 2.

**1.13 SCORING****1.13.1 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 sub-class. (S10 Chapter 4, 4.30.3)

A score given to a competitor shall be expressed to the nearest whole number, 0.5 being rounded up. (S10 Chapter 4, 4.30.4)

All distances are rounded up to the nearest 0.5 km. All times are taken to hours, minutes and seconds. (S10 Chapter 4, 4.30.5)

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, 4.30.6)

Deduction of penalty points shall be made after scoring for that task is completed. (S10 Chapter 4, 4.30.7)

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, 4.30.8)

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, Sub-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, 4.30.1)

**1.13.2 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.

## Part 2, Applies to 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 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 106 x 25 m. (This is the corrected density-altitude value for Beas de Segura Airfield). The penalty for failing to take off or land entirely within the deck will be 20% - 50% of pilot score, as briefed.

**2.1.3 CONTROL OF SUB-CLASS CONFORMITY:**

All aircraft will be weighed before the event, and 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 sub-class in which it is flown.

### 2.1.4 CONTEST NUMBERS

Three contest numbers will be provided for each competing aircraft. One (a square of 0.6 m) shall be displayed on a suitable space on the underside of the wing with the top towards the leading edge. The other two, (a square of 0.15 m), to be installed either side on vertical surfaces. (e.g. fin, cockpit side or pilot's helmet). All numbers shall be of a colour contrasting to the background.

### 2.1.5 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.

Prior to Registration all aircraft fuel system will be examined by the fuelling Marshals and all the tubes and/or pipes junctions will be sealed and photographs will be taken of the aircraft fuel configuration.

If, at any time in the championships the pilot needs to unseal it for repair or improvement purposes he will need to ask for a new inspection and seal process.

Aircraft that are found to have un-inspected alterations to the fuel configuration will not be allowed to take-off in the competition.

Main and auxiliary fuel tank caps will be sealed with steel wire and a lead seal. All competing aircraft must be prepared to receive this type of seal in a fast and easy way. Any aircraft that do not comply with these requirements will not be accepted in the championship.

Fuel consumption tasks will be included in the championships. For these, all aircraft must have a system that allows a sealable but fast and easy way to empty the remaining fuel after a task. Any aircraft that do not comply with these requirements will not be accepted in the championship.

Competitors must be able to easily demonstrate that their aircraft tanks are empty. If a Marshall has any doubt he will ask the competitor to start the engine until it stops. If the time taken by this causes the competitor to be late for a take-off or fuelling window there will be penalties established at the briefing.

At the end of fuel consumption tasks; if the engine runs for more than 60 seconds after the tanks have been emptied there will be penalties established at the briefing.

### 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:

$$P = Q/Q_{\max} \times 1000$$

where: Q = pilot score, Q<sub>max</sub> = 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 sub-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 sub-class shall be the pilot or crew gaining the highest total points in the sub-class.

- 2.3.5** The team prize shall be computed from the sum of the scores of the top three pilots in each task in the sub-classic sub-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.

## **Part 3, Applies to sub-class PF (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 to Pilots or any part of their PF's touching the ground anywhere outside the landing deck during a task.

In locations where standard landing decks are not practical, unless otherwise briefed the "deck" will be considered to be the area within 100m of a designated central marker. (Usually a windsock).

#### **3.1.5 CONTEST NUMBERS**

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

Pilots may also be provided with one or two small lightweight flags, one with their pilot number and one with their National flag. These shall be fixed to the canopy lines as briefed.

#### **3.1.6 EMERGENCY EQUIPMENT**

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

#### **3.1.7 PROTECTIVE EQUIPMENT**

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

#### **3.1.8 PROHIBITED EQUIPMENT**

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

### **3.2 FLIGHT CONTROL**

#### **3.2.1 TIMINGS**

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

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

Timings may also be taken when the pilot kicks a stick or flies overhead an observer as briefed 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.

### **3.2.2 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.

### **3.2.3 FUEL MEASUREMENT**

Fuel will be measured by weight or volume but will be consistent for any given refueling session. Refueling 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.

### **3.2.4 FLIGHT ACCURACY MEASUREMENT**

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.

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 PF 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 PF'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.

Photo Sector

Unless briefed otherwise, the photo sector is a quadrant (90° degree sector) on the ground with its apex at the turn point. The centre line of the quadrant extends through the turn point to the takeoff airfield.

## **3.4 FLYING THE TASKS**

### **3.5.1 PROPORTIONS**

The proportion of the scores 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 Director, until the moment the competitor leaves the deck having finished a task, or otherwise lands according to the outlanding rules.

### **3.5.2 TAKE-OFF**

A PF must be foot launched for all tasks.

No pilot may take-off without permission from the 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 PF 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 re-launch or the pilot risks being relegated to the end of the queue.

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.

### 3.5.3 FLIGHT LIMITATIONS

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

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

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

**3.5.5 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:

$$P = Q/Q_{\max} \times 1000$$

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.:  $P = Q/Q_{\max} \times 750 + y$  (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 sub-class shall be the pilot gaining the highest total points in the sub-class

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.

## Annex 1, Organiser's Trophies

### 1 Pilot achievement score

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

$$\text{PAS score} = 10,000 \times \frac{S_p}{S_{\text{Max}}}$$

Where:

$S_p$  = total pilot score in all tasks in the class

$S_{\text{max}}$  = 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 Best female crew trophy

Will be awarded to the highest scoring (PAS) all female crew in the classic classes.

### 3 Manufacturer's Team Trophies.

3.1 There will be one Classic Classes Manufacturer's Team Trophy and one PPG Manufacturer's Team Trophy. The team score is the sum of the 3 greatest PAS scores in each team.

3.2 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.

- 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] .....

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 2001 World Air Games 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 18 June 2001, participating in the Games.

[Signed] ..... [Date].....



Name of Team Leader (Classic classes) .....

Name of Team Leader (PPG) .....

Names/number of Assistants if known .....

Names/number of accompanying technical officials if known .....

**ENTRY FEES**

	Fee	Number	Total Entry fee
Pilot	450 Euros		
Co-pilot	350 Euros		
Team Leader	350 Euros		
Technical Official Assistant	300 Euros		

This amount is enclosed/will be paid by (date) .....in the form of (currency) .....

**IMPORTANT! Avoid a surcharge! Make sure your entry fees are paid before 31 March 2001**

Late Entry Fees:

- Entry Fees paid between 1 April and 30 April 2001: 10% surcharge
- Entry Fees paid between 1 May and 31 May 2001: 15% surcharge
- Entry Fees paid after 1 June 2001: 25% surcharge
- The closing date for the receipt of entry fees is 15 June 2001. Late entries may not be accepted

The entry fee is to be transferred before March 31, 2001 to a Bank and account to be notified in Bulletin No. 2 by the 2001 ECO.

We declare that the above information is true.

Signed : ..... Position in NAC .....

Print Name ..... Date .....

**INSURANCE:**

Before the aircraft is flown, documentary proof must be presented to the organisers at registration.

- All competing aircraft must have a Certificate of Insurance against Third Party Liability, valid in Spain, covering a minimum limit of 300,000 Euros.
- Each competitor must have a Personal Certificate of Insurance against Third Party Liability, valid in Spain, covering a minimum limit of 300,000 Euros. The organizer will offer insurance services for those competitors who do not have sufficient coverage.
- Each competitor must be a holder of a Personal Sporting Accident Health Insurance Policy, valid in Spain, with a reasonable coverage.

Further information is provided in Bulletin 2.

**PUBLICITY:**

Forms where pilots may enter their pre-registration and biographical details will be available at <http://www.flymicro.com/wag2001/entry>

*A small discount may be available for correct information received before registration!*

**OTHER REQUIREMENTS:**

Each NAC shall provide providing the organizer with 3 flags (150x100 cm) and 1 national anthem in Audio CD format for each site prior to 31 March 2001.

# TASK CATALOGUE

## AUTHORITY

This Task Catalogue is to be used in conjunction with the Local Regulations. The General Section and Section 10 of the FAI Sporting Code takes precedence over the Local Regulation and Task Catalogue wording if there is ambiguity.

## CLARIFICATION

Note: "Classic classes" are Microlight Sub-classes AL1, AL2, WL1 and WL2. PPG is Microlight sub-class PF1

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### 1. Part for All Sub-classes

1.1. Introduction

1.2 Task types

### 2. Classic classes Tasks

### 3. PPG Tasks

## Part 1, Applies to All Sub-classes

### 1.1 INTRODUCTION

This catalogue describes tasks which may be set in FAI World and Continental championships. It does not preclude new tasks provided they have been tried out satisfactorily in national competitions and are clearly described and accepted when the FAI Microlight Commission (CIMA) approves the Local regulations.

Good tasks make for good championships, but tasks also drive the design direction for the aircraft. For example, microlights in the Classic-classes would soon lose their short field capability if no more precision landing tasks into a 100m deck were given.

Flight planning and navigation tasks develop good pilot skills but they, too, affect the characteristics of competition aircraft so a Director must try to set a reasonable balance between tasks where ultimately speed is the advantage and economy is the advantage. These tasks should be as long as possible, so that pilot skills are tested by having to fly over new and different country.

Competition Directors are cautioned against setting a few complicated tasks in favour of lots of simple ones, it is all too easy for a Championship to end with the minimum of tasks required (S10 Chapter4, 4.3.3) and there is nothing more likely to upset pilots than if they think they have not flown enough in a championship to properly demonstrate their skills.

### 1.2 TASK TYPES

#### 1.2.1 GENERAL

Tasks fall into Three Categories :

- A** Flight planning, navigation estimated time, speed or fuel consumption. No fuel limitation.
- B** Fuel economy, speed range, duration, with limited fuel.
- C** Precision

The proportion of each task to be used is stated in S10, 4.24.3

Any task may be set more than once, either identically or with variations.

Distances should be as long as possible referring to the recommended still air range of the competing aircraft stated in S10 Chapter 4, 4.13.7 .

In any task requiring pre-declaration of speed, elapsed time or estimated fuel, the Director may set up hidden gates through which the pilot would fly if on the correct flight path. Pilots failing to be checked

through such gates or who are observed flying a devious path to adjust timing/speed errors or fly more than once or the wrong way through a gate may be penalised.

No information will be given at briefing on the existence or whereabouts of hidden gates, or the method by which they are controlled. The only method of aircraft identification will be the contest number. It is the crew's responsibility to ensure it is properly affixed at all times.

The Director may set a time period for completion of a task in addition to the last landing time.

## Part 2, Tasks for Classic classes

### INTRODUCTION

It is evident that the more tasks which are flown, the more pilots are genuinely able to demonstrate their skills and proficiency as Microlight pilots. This is logistically difficult due to the large numbers of pilots expected, and, even with two decks, the time it takes to physically get them off the ground.

Consequently the director will be introducing into this championship the concept of "Multitask flights" where up to three totally different and/or separate tasks may be set for a single flight. The start and end points of each task will be clearly described in the task briefing. Multitask flights will inevitably be quite long and pilots are strongly advised to ensure that their aircraft are genuinely capable of a range of 250 Km in still air and not just at their most economical speed.

The expected daily schedule will be to perform a long flight for all classes in the morning (multitask or not). The afternoons and evenings will be spent doing duration and precision tasks in groups divided by class. This means that all pilots are likely to have one or two free afternoon/evening periods.

#### 2.A1. NAVIGATION WITH TIME AND/OR FUEL ESTIMATE

Flight around a course defined by sequential turn points, with pilot pre-flight declaration of estimated time and/or fuel estimate to complete course and/or to reach turn points.

##### Scoring:

- Score achieved by number of turn points or distance flown, minus errors in estimations.

##### Briefing info:

- Take-off time and order, window period, time of last landing.
- If part of a Multi-task flight, detailed descriptions of the start and end points of the task.
- Map of turn points, photo sector details.
- Landing requirements and outlanding penalty (not less than 20%).
- System for handling pre-flight declarations.

#### 2.A2. NAVIGATION WITH TIME AND/OR FUEL ESTIMATE

Flight around a circular, polygonal or straight course, (or any combination) containing several groups of numbers or letters that may be true or false, only one of which is exactly on the line, with pilot pre-declared time and/or fuel estimate to complete a course.

##### Scoring:

- Number of correct digits in correct sequence, minus errors in estimations.

##### Briefing info:

- Take-off time and order, window period, last landing time.
- If part of a Multi-task flight, detailed descriptions of the start and end points of the task.
- Map of the course, photo sector.
- Landing requirements and outlanding penalty (not less than 20%).
- System for handling pre-flight declarations.



**2.A3. NAVIGATION WITH TIME AND/OR FUEL ESTIMATE**

Flight around a course with 2 mandatory turn points separated by a half circle course along which there are 4 or more numbers or letters, with pilot pre-declared time and/or fuel estimate to complete the course.

**Scoring:**

- Correct course flown , minus errors in estimations.

**Briefing info:**

- Take-off time and order, window period, time of last landing.
- If part of a Multi-task flight, detailed descriptions of the start and end points of the task.
- Map of course with photo sectors.
- Landing requirements and outlanding penalty (not less than 20%).
- System for handling pre-flight declarations.

**2.A4. NAVIGATION WITH ESTIMATED SPEED**

Flight along a line defined on the official map, until hidden turn point 1 is found, then along a given new track to find turn point 2. From this to a mandatory turn point at least 20 km distant, having pre-declared a ground speed for the leg, to either a finishing line or photographed finishing point. Finish line may be at base.

**Scoring:**

- Correct course flown minus errors in estimations.

**Briefing info:**

- Map showing first track, heading for TP2, position TP3.
- Take-off time and order, window period, time of last landing.
- If part of a Multi-task flight, detailed descriptions of the start and end points of the task.
- Photo sectors for markers 1 and 2 and mandatory turn point.
- Landing requirements and outlanding penalty (20%).
- System for handling pre-flight declarations.

**2.A5. FLIGHT PLANNING AND NAVIGATION**

Flight along a given line to find turn point 1, identified by true heading to turn point 2. At turn point 2, ground markers will give true heading to turn point 3. From turn point 3 return to base within briefed elapsed time.

**Scoring:**

- Course accuracy minus penalty for exceeding time limit.

**Briefing info:**

- Take-off time and order, window period, time limit.
- If part of a Multi-task flight, detailed descriptions of the start and end points of the task.
- First track and photo sector requirements.
- Landing requirements and outlanding penalty (20%).
- Time penalty.

**2.A6 PURE SPEED**

Flight as fast as possible between two control points or gates not less than 15Km apart.

**Scoring:**

- Maximum speed in Km/h

**Briefing info:**

- Take-off time and order, window period, time limit.
- If part of a Multi-task flight, detailed descriptions of the start and end points of the task.
- First track and photo sector requirements.
- Landing requirements and outlanding penalty (20%).

**2.B1. DISTANCE AND SPEED**

Flight to one or more optional turn points for distance, followed by mandatory turn point with pilot pre-declared elapsed time for final leg to base.

**Scoring:**

- Distance flown plus accuracy of speed/time.

**Briefing info:**

- Fuel limit and fuelling procedure.
- Take-off time and order, window period.
- Map of optional and mandatory turn points and photo sector details.
- Landing requirements. Outlandings score zero.
- System for handling pre-flight declarations.

**2.B2. FUEL ECONOMY**

Out and return flight along a designated route to an optional turn point and return to base. Optional turn points may be designated or easily identifiable features on route, such as river bridges or road rail crossings, chosen by the pilot.

**Scoring:**

- Distance flown.

**Briefing info:**

- Fuel limit (eg 15 kgs), and fuelling procedures.
- Take-off time and order, window period, last landing.
- Map of route with any turn point requirements.
- Photos to be taken looking back down track.
- Landing requirements. Outlandings score zero.

**2.B3. FUEL ECONOMY AND TACTICAL PLANNING**

Flight over an area containing 10 - 20 turn points which may be turned only once each. Base airfield can be used as a turn point.

**Scoring:**

- Distance flown.

**Briefing info:**

- Fuel limit and fuelling procedures.
- Take-off time and order, window period, last landing.
- Map of area with turn points.
- Landing requirements. Outlandings score zero.

**2.B4. CIRCUIT FOR SPEED PLUS DISTANCE**

Flight around a 3 or 4 point closed circuit course (minimum 50 km length), then fly an out and return to one of several optional turn points. Take-off should be timing start. Data back camera photo for finish of timed circuit.

**Scoring:**

- Speed of fastest aircraft over timed section, plus distance flown (equal points).

**Briefing info:**

- Fuel limit and fuelling procedures.
- Take-off time and order, window period.
- Map of route and photo sectors.
- Landing requirements. Outlandings score zero.

**2.B5. ENDURANCE**

Flight for as long as possible with landing at base. The flight area may be left open or defined.

**Scoring:**

- Total time in air from take-off to landing.

**Briefing info:**

- Fuel limit (eg 3 kgs), and fuelling procedures.
- Map of flight area if defined.
- Take-off time and order, window period, last landing.
- Landing area limits. Outlandings score zero.
- Thermal circling rules reminder.

**2.B6 FUEL EFFECIENCY**

Flight attempting to achieve the best fuel efficiency in Km/Litre.

**Scoring:**

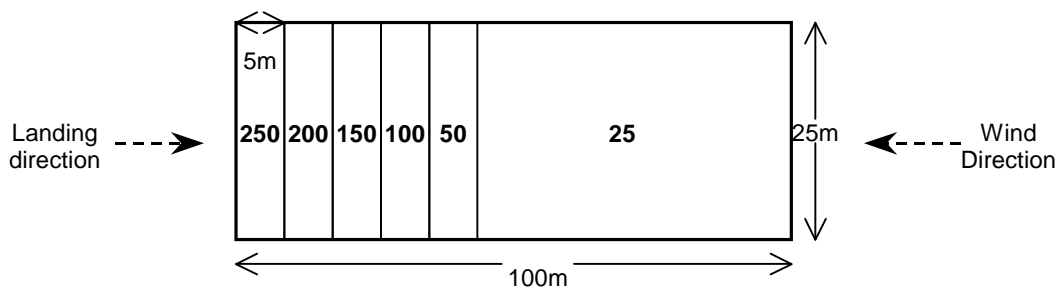
- Best efficiency in Km/litre

**Briefing info:**

- Take-off time and order, window period, time limit.
- If part of a Multi-task flight, detailed descriptions of the start and end points of the task.
- Landing requirements and outlanding penalty (20%).
- Time penalty.

**2.C1. PRECISION LANDING**

Landing in the marked 5m scoring divisions of the 100 x 25m deck with engine stopped.



**Scoring:**

- Maximum score 250 points.
- Pilot score is 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

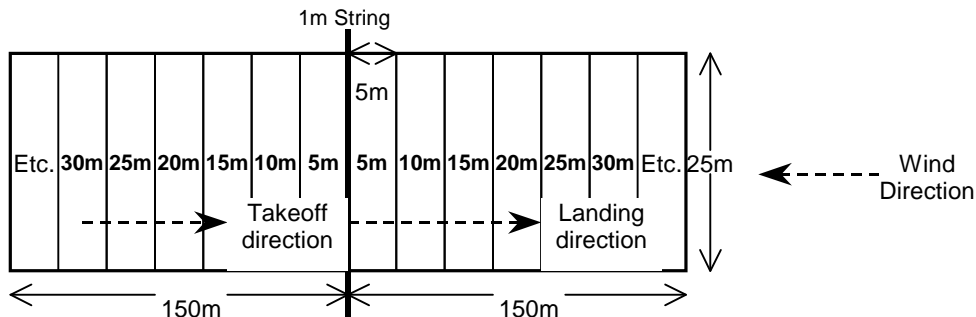
- Zero score if aircraft runs out of the deck or is unable to taxi off unaided, except that a failure of the engine to start will not incur penalty.

**Briefing info:**

- Take-off time and order.
- Flight patterns and circuit procedures.
- Height and position for stopping engine.
- Landing and taxiing requirements.

**2.C2. SHORT TAKE OFF AND LANDING OVER OBSTACLE**

Two 150m x 25m decks will be used, one for takeoff and the other for landing. A clearly visible string at 1m height will be placed at the end of the takeoff deck and at the beginning of the landing deck.



The pilot chooses a location ahead of the string in the takeoff deck from where he will take-off. He then attempts to take-off over the string without breaking it. The pilot then flies a circuit as briefed to a given altitude, position and direction where he stops the engine, flies over the string without breaking it and lands as short as possible in the landing deck.

**Scoring:**

- Maximum score is 500 points.

$$\text{Pilot Score} = \left( 250 \times \frac{150 - \text{TDp}}{150 - \text{TDMin}} \right) + \left( 250 \times \frac{150 - \text{LDp}}{150 - \text{LDMin}} \right)$$

Where:

TDp = Pilot's takeoff distance

TDMin = Shortest takeoff distance in the sub-class

LDp = Pilot's landing distance

LDMin = Shortest landing distance in the sub-class

**Takeoff score:**

- Pilot score is considered to be the value of the zone over which lies: "The nearest part of the aircraft to the string".
- Zero takeoff score for running out of the deck or breaking the string on takeoff.

**Landing score:**

- Pilot score is 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 scoring value of the zones entered.
- Touching on a line scores the higher scoring value of the two zones
- Zero landing score for: Breaking the string on landing, running out of the deck or being unable to taxi out of the deck unaided, except that a failure of the engine to start will not incur penalty.

**Briefing info:**

- Take off time and order.
- Picking the box for take off
- Flight patterns and circuit procedures.

- Height and stopping of the engine
- Landing and taxiing requirements

## Part 3, Tasks for sub-class PF (PPG)

### 3.A1 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

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

Where, according to briefing;

Either:

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

OR

NBp = the distance flown by the pilot in the task.

NBMax = the maximum distance flown in the task.

### 3.A2 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

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

Where, according to briefing;

Either:

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

OR

NBp = the distance flown by the pilot in the task.

NBMax = the maximum distance flown in the task.

AND

Bto = Pilot's takeoff bonus points

Bld = Pilot's landing bonus points

BldMax = The maximum landing bonus points achieved.

### 3.A3 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, according to briefing;

Either:

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

OR

NBp = the distance flown by the pilot in the task.

NBMax = the maximum distance flown in the task.

AND

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

### 3.A4 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.
- All landing markers may be attempted with engine on unless the marker is in the landing deck and is the final element in the task.

- If the pilot falls over as a result of a landing: zero landing score for that landing.
- If the pilot obstructs another competitor attempting to land at a landing marker penalties will apply.

**Scoring**

$$\text{Pilot score} = \left( 400 \times \frac{\text{NBp}}{\text{NBMax}} \right) + (250 - T) + \text{Bto} + \left( 200 \times \frac{\text{Bld}}{\text{BldMax}} \right)$$

Where, according to briefing;

Either:

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

OR

NBp = the distance flown by the pilot in the task.

NBMax = the maximum distance flown in the task.

AND

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

Bto = Pilot's takeoff score

Bld = Pilot's landing points

BldMax = The maximum number of landing points achieved in the task.

**3.B1. PURE 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**

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

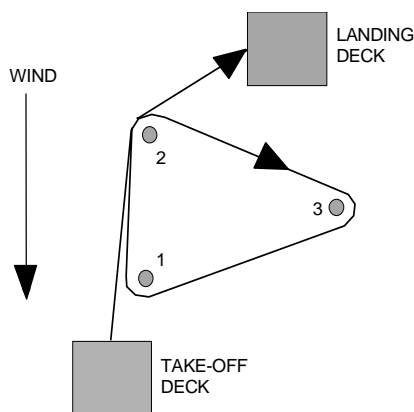
Where:

Tp = The pilot's time,

Tmax = The longest time taken to complete the task

**3.B2 ECONOMY & DISTANCE****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.

## 3.B3 ECONOMY & NAVIGATION

### 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



**3.B4. ECONOMY & PRECISION****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**

$$\text{Pilot score} = \left( 500 \times \frac{TP}{T_{\max}} \right) + B_{to} + B_{ld}$$

Where:

TP = The pilot's time

Tmax = The longest time taken to complete the task

Bto = Takeoff bonus points

Bld = Landing bonus points

**3.B5 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,

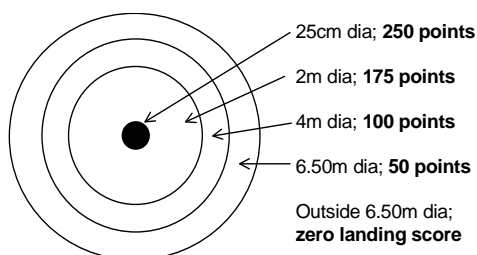
$t_{\text{Min}}$  = The best time (Part 1)

$d_p$  = the pilot's distance

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

**3.C1. PRECISION TAKE-OFF AND LANDING****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 if 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**

$$\text{Pilot score} = (\text{Bto} + \text{Bld})$$

Where:

Bto = Takeoff points

Bld = Landing points

**3.C2. PRECISION CIRCUIT IN THE SHORTEST TIME**

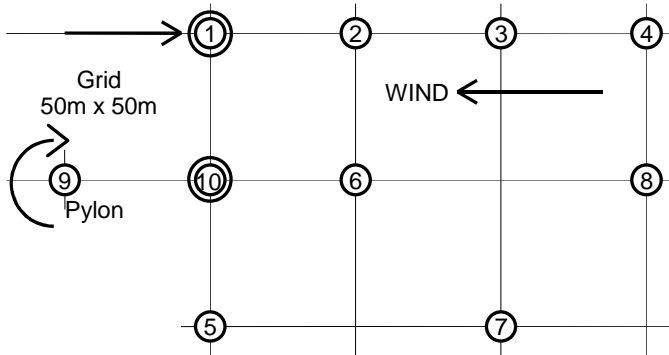
**Objective**

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

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.

**Description**



**Special rules**

- A valid strike on a target is one where the pilot or any part of the PPG 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**

$$Q = \frac{NQ^3}{Sp} \quad \text{Pilot Score} = \left( 1000 \times \frac{Q}{Q_{max}} \right)$$

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.C3. SLOW / FAST SPEED**

**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: VP1 = zero and EP = zero
- If the pilot or any part of his PPG touches the ground during the second leg: VP2 = zero and EP = 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.

### Scoring

$$\text{Pilot score} = \left(125 \times \frac{V_{p1}}{V_{\text{max}}}\right) + \left(125 \times \frac{V_{\text{min}}}{V_{p2}}\right) + \left(250 \times \frac{E_p}{E_{\text{Max}}}\right)$$

Where:

V<sub>max</sub> = The highest speed achieved in the task, in Km/H

V<sub>p1</sub> = The speed of the pilot in Km/H in the first leg of the task

V<sub>min</sub> = The lowest speed achieved in the task, in Km/H

V<sub>p2</sub> = The speed of the pilot in Km/H in the second leg of the task

E<sub>p</sub> = The difference between the pilot's slowest and fastest speeds, in Km/H

E<sub>max</sub> = The maximum difference between slowest and fastest speeds, in Km/H

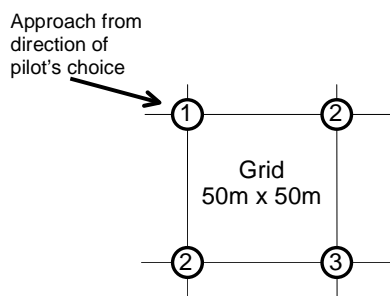
## 3.C4 THE FOUR STICKS

### Objective

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

### Description

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.

**3.C5 Up - down - Precision landing****Objective**

To climb to a height of pilot choice, switch off the engine and glide to a precision landing as fast as possible.

**Description**

A "kicking stick" is positioned near to the precision landing target. The pilot kicks the stick to start the clock. The pilot climbs to a height of pilot choice and cuts his engine. The engine must be off for at least 30\* seconds before the pilot touches the ground as near as possible to the centre of a 10m radius target. The clock stops when the pilot touches. Pilot time is corrected with a time bonus or penalty depending on pilot's landing performance.

**Special rules**

- The pilot may only have 3 attempts at kicking the stick.
- 5\* seconds are subtracted from the pilot's time if the first touch is on a football at the centre of the target.
- 10\* seconds are added to the pilot's time for every whole second less than 30 seconds between engine stop and first touch.
- 1\* second is added to the pilot's time for every whole 5\*cm of distance from the furthest point of first touch to the centre of the target. (Max 5m\* [100 sec]\*).
- 30\* seconds are added to the pilot's time for falling over on landing.

**Scoring**

$$\text{Pilot score} = 500 \times \left( \frac{T_{p\text{Min}}}{T_p} \right)$$

Where:

$T_p$  = Pilot time between kicking stick and first touch including any landing bonus or penalty.

$T_{p\text{Min}}$  = Shortest time between kicking stick and first touch including any landing bonus or penalty.

\* = Numbers may be varied by director at Pilot briefing.

**3.N1 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**

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

Where:

$n_{\text{Min}}$  = The minimum noise in dBA achieved in the sub-class

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

**3.N2 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 ( $\pm 10$ ft). 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**

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

Where:

nMin1 and nMin2 = The minimum noise in dBA achieved on each run in the sub-class.

nP1 and nP2 = The noise achieved by the pilot in dBA on each run.

# Suggested equipment required for a mobile WAG 2001 PPG championship

By RMH, 25 Sept 2000

With this mobile championships we will need quite a lot of vehicles. I would suggest that fixed equipment like computers, copiers Etc are much better kept in a vehicle rather than establishing an office in a building or a tent at each stopping place. My idea of the perfect main office would be an air conditioned portable building on a truck (truck 1) and a big "RV" (camping car) of the American style which already has air conditioning.

For the marshals I think 3 small buses (eg Transit) would be more flexible and more useful than one big bus as they can move independently. Some people with their own cars to put out markers, man hidden gates Etc. would also be useful.

Most pilots will be camping. Some have camping cars but many are in tents. Because we have early starts in PPG's I think they will usually prefer to camp on the airfield rather than go to the nearest camping site, so we must have a truck with portable toilets and showers. (Truck 2, also with generator and other misc. equipment)

There is then the problem of the Jury. I suggest one of those "people carriers" (eg Renault Espace). They can then use this as their office and be totally independent. (e.g. they could go on holiday to the beach!)

Briefings: I would think each stopping place has a hangar or some suitable shady place for briefings. Seats for pilots are not necessary - it makes briefings faster!

Refreshments: It would be nice to have a mobile "bar" which travelled with us for coffee in the morning, cold soft drinks in the day and beer in the evening. If we get big crowds (which we will try to do) it might even make some money!

## ***Daily plan of action***

I rather imagine it will have to be run on a "military style" schedule; something like:

Marshals Team 1 leave early to prepare the destination airfield. Trucks 1, 2 & bar leave after pilots start taking off. Teams 2 & 3 handle takeoff marshalling Etc. As soon as all pilots are in the air, Team 2 moves directly to the destination airfield with the takeoff scores, timings Etc. and to help with landing marshalling, Team 3 clears up the departure airfield and comes later. RV moves with Director(s).

## ***Vehicles***

- 1 x RV as director's HQ
- 1 x 12m truck (Truck 1) with air-conditioned portable building as main office (photocopier Etc)
- 1 x 12m truck (Truck 2) with equipment and services: big generator, portable toilet building, portable shower building.
- 1 x mobile bar
- 3 x small buses for marshals transport.
- 1 x people carrier for Jury
- Some cars

## ***Office***

- If it is on a truck - stairs to get in!
- Computers: Min 4; Laptop PC for Director, PC for scoring, PC for task control / comms / scoring and PC for comms / accounts / other stuff. All connected to a local network in the Office with a decent (fast!) laser printer, a second ordinary printer and modem.
- Communications: Can it be possible to do some sort of deal with a Spanish mobile comms supplier so we have mobile internet in the office? With good comms we can do real time instant scoring, (internet & WAP), and recent task reports with photos for media.
- 1 x BIG photocopier which does multi-page documents, collating & stapling. This is about the most important thing not to underestimate; if we are doing 3 tasks for 50 pilots this can easily mean 600 - 1000 copies EACH DAY!
- 1 x small photocopier which can be used for small jobs, and can be used in emergency when the big photocopier breaks down.

continued/ 2

- Very large quantities of photocopy paper; (Suggest 5,000 sheets)
- Chairs, tables Etc. in office.
- Large quantity of office supplies (pens, clipboards, coloured pencils Etc)
- A2 paper on easel for briefings.
- 2 x Photo negative viewers + TV's
- 10 x stopwatches

## ***Airfield***

- Large quantity of red/white plastic tape to mark decks & spectator areas (+ stakes)
- 2 sets kicking sticks (2m ski slalom poles x 25 or 30)
- Min. 2 Windsocks + poles
- 1 x 50m measuring tape (a measuring "wheel" would be better.)
- 2 x big rolls restaurant paper (for markers)
- 4x 25Kg bags lime (white powder for making marks on ground)
- 2 x footballs (for precision landing)
- 2 x electric "football substitution" notice boards. (Device used in football to display a number)
- Mobile public address system
- Electronic scoreboard - would be very good for public presentation.

## ***Pilot Equipment.***

- Large (0.5m) sticky numbers for PPG's and small ones for pilot helmets.
- Colour photocopy maps for each stage.

## ***Marshals.***

### **Flying operations.**

- 1 Manager.
- 3 teams of three or four people in minibuses.
- Two independent marshals with their own cars (to put out markers Etc.)

Responsible for all PPG takeoff, in-flight and landing marshalling.

### **Office**

- 1 Manager.
- 1 Scoring.
- 1 PR & web site updates person.
- 3 General duties (Photo control, accounts, photocopying Etc.).

Transportation between sites with team 2.

### **Logistics**

- 1 Manager
- 1 Public announcement person
- 2 Truck drivers
- 6 General duties (Airfield setup, maintenance and dismantling Etc)

Transportation with Marshals teams 1 & 3

TOTAL: About 30 people.



## **El equipo sugerido requerido para un campeonato móvil WAG de 2001 PPG**

de RMH, el 25 de sept. 2000

Con este los campeonatos móviles necesitaremos absolutamente muchos de vehículos. Sugeriría que el equipo fijo tenga gusto de los ordenadores, las copiatoras que los etc se mantienen mucho mejor un vehículo más bien que establecer una oficina en un edificio o una tienda en cada lugar que para. Mi idea de la oficina principal perfecta sería un edificio portable acondicionado aire en un carro (carro 1) y un " RV grande " (coche el acampar) del estilo americano que tiene ya aire acondicionado.

Para los mariscales pienso que 3 megabuses pequeños (eg tránsito) serían más flexibles y más útiles de un megabus grande como pueden moverse independientemente. Alguna gente con sus propios coches para poner hacia fuera las etiquetas de plástico, las puertas ocultadas hombre etc. también sería útil.

La mayoría de los pilotos acamparán. Algunos tienen coches el acampar pero muchos están en tiendas. Porque tenemos temprano comienzo en PPG's que pienso que él preferirá acampar en el campo de aviación más bien que que va generalmente al camping más cercano, así que debemos tener un carro con los tocadores y las duchas portables. (carro 2, también con el generador y el otro equipo misceláneo)

Hay entonces el problema del jurado. Sugiero uno de esos " portadores de la gente " (eg Renault Espace). Pueden después utilizar esto como su oficina y ser totalmente independientes (e.g. podrían ir el día de fiesta a la playa!)

Informes: Pensaría que cada lugar que para tiene un hangar o cierto lugar sombrío conveniente para los informes. Los asientos para los pilotos no son necesarios - hace informes más rápidos!

Refrigerios: Sería agradable tener una " barra móvil " que viajó con nosotros para el café por la mañana, las bebidas suaves frías en el día y la cerveza por la tarde. Si conseguimos grandes las muchedumbres (a que intentaremos hacer) puede ser que incluso haga un poco de dinero!

### ***Plan de la acción diario***

que me imagino algo que tendrá que ser ejecutado en un horario del " estilo militar "; algo tiene gusto:

Licencia del equipo 1 de los mariscales temprano para preparar el campo de aviación de la destinación. Carros 1, 2 y licencia de la barra después de sacar del comienzo de los pilotos. Despegue de la manija de los equipos 2 y 3 marsalling el etc. Tan pronto como todos los pilotos estén en el aire, el equipo 2 se traslada directamente al campo de aviación de la destinación con las cuentas del despegue, las sincronizaciones etc. y la ayuda con formar del aterrizaje, a los claros del equipo 3 encima del campo de aviación de la salida y viene más adelante. RV se mueve con Director(s).

- 1 x RV de los vehículos como del HQ del director
- carro de 1 del x 12m (carro 1) con el edificio portable con aire acondicionado como principal de la oficina (fotocopiadora etc)
- carro de 1 del x 12m (carro 2) con el equipo y servicios: el generador grande, edificio portable del tocador,
- los megabuses pequeños del 3 para los mariscales transporta
- la barra del 1
- el portador de la gente del 1 para el del jurado
- Los coches

### ***La oficina***

- Si está en un carro - escaleras a conseguir adentro!
- ordenadores del : Minuto 4; PC de la computadora portátil para el director, PC para anotar, PC para el control de tarea / los comms / que anotan y PC para los comms / las cuentas / la otra materia. Todos conectaron con una red local en la oficina con un decente (rápido!) impresora laser, una segunda impresora ordinaria y comunicaciones del - del módem:

continued/ 4

- Puede ser posible hacer una cierta clase de reparto con un surtidor móvil español de los comms así que tenemos Internet móvil en la oficina? Con los buenos comms podemos hacer anotar inmediato en tiempo real, (Internet y WAP), e informes recientes de la tarea con las fotos para
- La fotocopiadora GRANDE del 1 de los media que hace los documentos de páginas múltiples, clasificando y el sujetar con grapa. Esto está sobre la cosa más importante a no subestimar; si estamos haciendo 3 tareas para 50 pilotos esto puede significar fácilmente 600 - 1000 copias CADA DÍA!
- La fotocopiadora pequeña del 1 que se puede utilizar para los trabajos pequeños, y se puede utilizar en emergencia cuando la fotocopiadora grande rompe abajo de cantidades
- muy grandes de papel de la fotocopia; (sugiera 5.000 hojas)
- Sillas, vectores etc. en oficina.
- Cantidad grande de fuentes de oficina (plumas, sujetapapeles, lápices coloreados etc).
- Documento A2 sobre la base para los informes.
- 2 espectadores de la foto + TV's negativos.
- 10 cronómetros

## ***El campo***

- cantidad grande de cinta plástica de red/white para marcar cubiertas y el - 2 de las áreas del espectador (+ las estacas) fija golpear el - minuto
- de los palillos con el pie (postes del slalom del esquí de los 2m x 25 o 30).
- 2 mangas de viento + de los postes cinta que mide
- de 1 de los x 50m (una " rueda que mide " sería mejor.)
- papel grande del restaurante de 2 rodillos de x (para las etiquetas de plástico).
- 4x 25Kg empaqueta la cal (polvo blanco para hacer marcas en la tierra).
- 2 balompié de x (para el aterrizaje de la precisión).
- 2 de la " tarjetas de aviso eléctricas substitución del balompié " de x. (dispositivo usado en el balompié para visualizar un número).
- Sistema móvil del direccionamiento público.
- El scoreboard electrónico - sería muy bueno para la presentación pública.

## ***Equipo Pilotas.***

- (los 0.5m) números pegajosos grandes para PPG's y los pequeños para los cascos
- Correspondencias de la fotocopia del color para cada etapa.

## ***Mariscales.***

### **Operaciones de vuelo.**

- 1 encargado.
- 3 equipos de tres o cuatro personas en microbús.
- Dos mariscales independientes con sus propios coches (poner hacia fuera las etiquetas de plástico etc.)

Responsable de todo el despegue de PPG, durante el vuelo y de formar del aterrizaje.

### **Oficina**

- 1 encargado.
- 1 anotando.
- 1 banda y persona de las actualizaciones del Web site.
- 3 deberes generales (control de la foto, cuentas, fotocopia etc.).

Transporte entre los sitios con el equipo 2

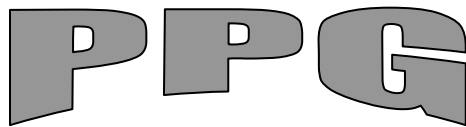
### **Logística.**

- 1 encargado.
- 1 persona pública del aviso.
- 2 programas pilotos del carro.
- 6 deberes generales (disposición del campo de aviación, mantenimiento y etc el desmontar).

continued/ 5

Transporte con los equipos 1 y 3 de los mariscales

TOTAL: Cerca de 30 personas.



**Beas de Segura, Cordoba, La Puebla de los Infantes,  
Villeneuve del rio y Minas, Sevilla, Lebrija, Sanlucar de Barrameda.  
Andalucia, 18 June – 1 July 2001**

## **Full Marshals Schedule**

### **Monday 18 to Friday 22 June, Beas de Segura**

Registration, practice Etc.

Marshals notes:

- Determine local flying rules
- Register all pilots
- Prepare full sets of maps. Only the Beas de Segura map to be released before Friday.
- Practice task: wed / thur /friday. Test digital photo systems.
- Between 08:00 & 10:00 daily, mark aircraft frame, engine & canopy with pink ink – ONLY if pilot has registered and is wearing competition numbers.
- Obtain large red, green and yellow flags + pole.

### **Friday 22 June, Beas de Segura**

**18:00** First general briefing and briefing for tasks 1 & 2

**20:00** Opening ceremony for microlight championships (all classes).

### **Saturday 23 June, Cordoba**

**19:00** Pilots should be on site at Cordoba ready to fly task 1 (precision).

Notes:

1) Beas de Segura to Cordoba by road = c.215 km

Marshals notes:

- Task 1 is probably a simple precision takeoff and landing.
- Task starts as soon as wind is low enough after 19:00
- No particular takeoff or landing order but all pilots must complete the task before it gets dark! Gives all pilots a chance to get their bearings around Cordoba.
- Must mark a big takeoff area separate from landing circles.
- Must mark two landing targets as widely separated as possible.
- Remember footballs at centre of targets!
- Immediately after landing: fuelling (6 litres) for next day morning task. Teams control teams according to briefing.
- **Important question:** How to handle overnight closed area security? Fence & Guards?

Marshals work for tomorrow:

- none

### **Sunday 24 June, Cordoba**

**07:00 - 11:00** Local area navigation task

Marshals:

- Task: To take off with a given quantity of fuel and locate an unknown number of markers within defined sectors and return to the deck.
- Pilots require cameras before takeoff
- Collect cameras upon landing
- After: A lot of photo analysis work.

**12:00 - 17:30** Possible local task

Marshals:

- Highly unlikely on this day. Let's settle in!

**18:30** Briefing for next 24 hrs tasks

**19:30 - 21:00** Precision task

Marshals:

- Will decide on the day which task. (If we have a lot of wind or pilots it could be a continuation of yesterday, or kicking sticks.

Marshals work for tomorrow:

- Lay out markers for early nav task. Need GPS?

## **Monday 25 June, Cordoba**

**07:00** Takeoff window opens for navigation task to La Puebla de los Infantes

Marshals:

- Task: 3.A4 NAVIGATION / ESTIMATED SPEED / PRECISION
- Record takeoff performance.
- In position on 1 bridge and at castle with clocks.
- Collect declaration sheets at landing.

## **Monday 25 June, La Puebla de los Infantes**

**11:00** Close of task window

**12:00 - 17:30** Possible local task

Marshals:

- Soaring task if wind permits
- Fuel control: 2 litres.

**18:30** Pilot briefing for next 48 hrs tasks

**19:30 - 21:00** Precision task

Marshals:

- Depending on events in Cordoba, kicking sticks task (in 3 dimensions!) or fast – slow.

Notes:

1) Cordoba to Puebla de los Infantes by road = c. 79 Km, by air: 60Km

## **Tuesday 26 June, Puebla de los Infantes**

**07:00** Takeoff window opens for navigation tasks to Sevilla (Tablada) via Villanueva del Rio y Minas

Marshals:

- 2 navigation tasks. Pilot choice when he departs Villanueva on second task, but must arrive at Tablada by 21:00
- Task 1: Multi – turnpoint with speed and distance
- Must collect photos rapidly at Villanueva, to return cameras to pilots for task 2
- Task 2: Multi-turnpoint number of turnpoints.
- Touch & go at Guillena on second task to make sure pilots go round Sevilla correct way.
- Collect cameras at Tablada
- After landing: Fantastic number of photos to analyse from both tasks.
- Fuel control for next morning. 6 litres
- Security? Fence & guards.

## **Tuesday 26 June, Sevilla (Tablada)**

**21:00** Window closes for navigation task

Notes:

1) Puebla de los Infantes to Villanueva del Rio y Minas by road = c. 49 Km, by air: 28Km

2) Villanueva del Rio y Minas to Sevilla (Tablada) by road = c. 60 Km, by air: 45Km

## Wednesday 27 June, Sevilla (Tablada)

**07:00 - 11:00** Local area navigation task

Marshals:

- Speed triangle and out and return
- Setup 4 sticks x 3 for intermediate stage.
- Not so difficult photo analysis (3 pix each pilot)

**12:00 - 17:30** Possible local task

Marshals:

- Soaring if we have not done it.

**18:30** Briefing for next 24 hrs tasks

**19:30 - 21:00** Precision task

Marshals:

- Fuel control: 2 litres
- Laps task: Huge circuit around entire airfield, all (or most) competitors flying simultaneously.
- 3 "safe" landing areas to be marked with lime.
- 1 takeoff area
- Spectators must be on strip, but not in takeoff or landing zones: Crowd management problem!

## Thursday 28 June, Sevilla (Tablada)

**07:00** Takeoff window opens for navigation task to Lebrija

Marshals:

- UL Fuel navigation.

## Thursday 28 June, Lebrija

**10:30** Window closes for navigation task

**12:00 - 17:30** Possible local task

Marshals:

- Soaring if we have not done it.

**18:30** Briefing for next 24 hrs tasks

**19:30 - 21:00** Precision task

Marshals:

- Depends what we have done already. Site most suitable for precision takeoff & landing.

Notes:

1) Sevilla (Tablada) to Lebrija by road = c. 63 Km, by air: 47Km

## Friday 29 June, Lebrija

**07:00** Takeoff window opens for navigation task to Sanlucar de Barrameda

Marshals:

- UL Fuel navigation.

## **Friday 29 June, Sanlucar de Barrameda**

**10:30** Window closes for navigation task

**12:00 - 17:30** Possible local task

Marshals:

- UL Fuel: Speed over 50 Km triangle.
- Two sets of marshals on road junctions.

**18:30** Briefing for next 24 hrs tasks

**19:30 - 21:00** Precision task

Marshals:

- Depends on what we still have to do.
- Possible fuelling afterwards. Security, fences, guards?

Notes:

1) Lebrija to Sanlucar de Barrameda by road = c. 34 Km, by air: 30Km

## **Saturday 30 June, Sanlucar de Barrameda**

**07:00** Takeoff window opens for last task (Navigation or precision or economy)

Marshals:

Likely to be an economy task, depends on scoring proportions to date.

**12:00** Final scores closed

**21:00** Prize giving ceremony & party.

## **Sunday 1 July, Sanlucar de Barrameda**

**09:30** Buses depart for WAG closing ceremony in Jerez 11:00



# PPG



**Beas de Segura, Cordoba, La Puebla de los Infantes,  
Villeneuve del rio y Minas, Sevilla, Lebrija, Sanlucar de Barrameda.  
Andalucia, 18 June – 1 July 2001**

## SUPPLIMENTARY NOTES

Welcome to the II World Air Games and World Championships for FAI class RPF1 (PPG's) 2001.

The championships this year are different to anything tried before in that it is moving to a new location each day. It is likely to be a tiring job for all concerned, but who said a championships should be easy? It takes advantage of the PPG's ability to fly safely near to spectators and so we are "taking our sport to the people". Hopefully we will get lots of spectators and good media coverage. Unfortunately the promised climax; a flight inside the Olympic stadium in Sevilla now looks unlikely, but having flown the route twice in the last 10 days I can promise you it is not going to be dull! We will be flying next to historic cities over broad arable plains, rugged hills, olive groves, vineyards, rice paddies, and the seaside. I can't say I will be having much fun (I would rather be flying) but I hope you will.

*Richard Meredith-Hardy, Championships director.*

**Below are notes to all competitors in the RPF1 class (PPG) with reference to local conditions supplementary to the Rules and Task catalogue published 28 November 2000 on [www.flymicro.com/wag2001](http://www.flymicro.com/wag2001)**

Those items in this document marked with double sidebars are classified as regulations supplementary to the published local regulations.

### **HQ**

The HQ of the PPG championships will be in the main building at Beas de Segura airfield until 20:00 Friday 22 June. Thereafter it will be in the big red trucks. The official clock and official notice board will always be displayed close to the HQ.

All competitors are encouraged to inspect the official notice board at frequent intervals.

All timings by marshals will be synchronised against the official clock. Competitors are encouraged to synchronise their clocks against the official clock.

### **Pilot Registration**

Registration is open from 12:00 Tuesday 19 June to 14:00 Friday 22 June at the following times: 09:00 – 14:00 and 17:00 – 20:00.

### **Manufacturer's teams**

All pilots are encouraged to join a manufacturer's team. Every pilot can be in one manufacturer's team, according to the manufacturer of their backpack OR canopy OR engine. It is entirely independent of your national team. Please inform the organization at registration which manufacturer's team you wish to join (or create).

The exact rules are contained in Annex 1 to the Local Regulations.

### **Aircraft inspection and identification**

After each pilot has registered and has been issued with a competition number, and has applied them to their aircraft, they must present their machines for inspection in the takeoff area on any practice day morning between 08:00 and 10:00. The competition number will be marked on the pilot's engine, power unit frame and canopy with a special indelible material.

Any pilot who lands from a task will score zero in the task if his machine does not have **all** of these three marks matching his correct competition number.



If, for any reason a pilot wishes to change a part, then the normal rules apply. It is the pilot's responsibility to present both the old part and the replacement part for re-marking by the organization before taking off in the next task.

## Maps

Six official maps are provided, they are all printed specially by the Ejército de Tierra for the championships. Each one is named in the top left corner:

Beas de Segura; 1:50:000 To be used for practice in the Beas de Segura area.

Cordoba, 1:50,000 For tasks in the Cordoba area.

Cordoba; 1:250,000 For the flight between Cordoba and La Puebla de los Infantes

Ruta del Guadalquivir; 1:250,000 For flights between La Puebla de los Infantes and Sanlucar de Barrameda

Sevilla, 1:50,000 For flights in the Sevilla area.

Sanlucar de Barrameda; 1:50,000 For flights in the Sanlucar de Barrameda area.

|| Only one of these maps will be the official map for each task. This will be specified in the task sheet. ||

The 1:50,000 maps are very detailed and of excellent quality and accuracy. The 1:250,000 maps are not so good for PPG's but are the only alternative to having several sheets for one task.

## Practice

Practice is recommended at Beas de Segura. It is NOT ALLOWED on any part of the published route between 18 - 22 June. This is for the simple reason that the route goes very close to several other WAG sites and they are practising too! We have made special arrangements with each organizer for the days when we are passing near them in the championships. No official maps other than the Beas de Segura one will be issued until the first briefing.

Although there will be a lot of airport traffic in the practice week, we will try to make it as easy as possible for everyone to fly when they want. It is vital, for everybody's safety that certain simple but essential regulations are observed:

PPG's MUST NOT fly over the long airstrip (27) EVER! This will kill you!

PPG takeoff anywhere on the short airstrip or across the parking. Be careful of taxiing aircraft.

Fly in and out to the NORTH. Stay below 500 ft until you are well clear of the microlight circuit pattern.

## Digital Cameras

|| Digital cameras supplied by the organization will be used as "primary" camera in tasks where turnpoint photos are required. ||

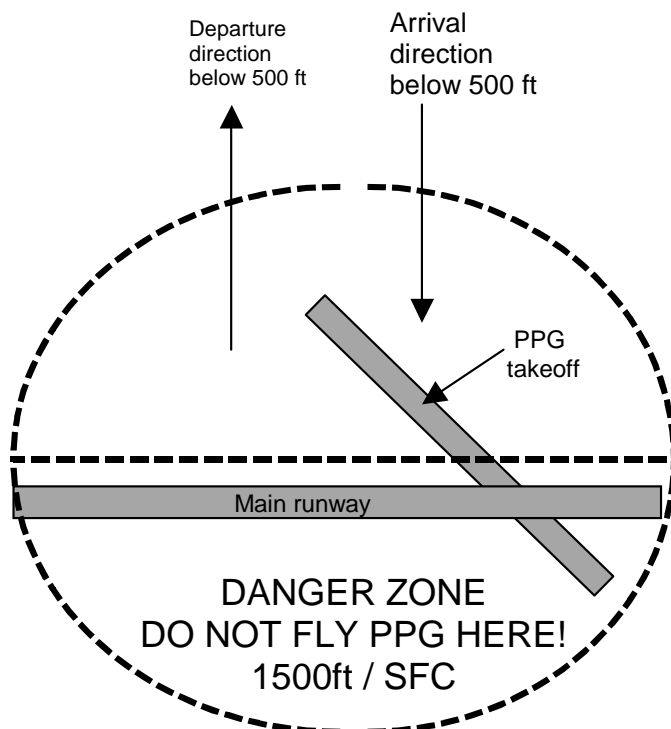
See the separate sheet for rules and guidance.

## Photo sector

The centreline is always looking from the pilot, across the turnpoint, towards the flying site where that task finishes. Margin of error is up to 45° either way.

## Practice task

Pilots may fly a very simple practise task on Wednesday 20 June, Thursday 21 June or Friday 22 June. The main objective of this task is to become familiar with the digital camera and view the results. No overall score will be given. Pilots may fly the task as many times as they like. Please see the director for briefing.



## **Fuel tanks**

All tasks will be run on the basis that your PPG has a still air range of 100Km with full fuel.

Pilots are reminded of rule 1.9.3 in the local regulations: *All aircraft must be equipped with a simple method of sealing the fuel tank.* Competitors should ensure their fuel tank can be effectively sealed BEFORE the first fuel limited task.

## **First briefing**

Will be in the briefing room at the Beas de Segura main building at 18:00 on Friday 22 June 2001. Briefing information will be made available at 16:00 precisely.

This briefing will detail the first two tasks and also much detail about the towns and the locations of all the airfields on our route.

## **Opening Ceremony**

Will be at Beas de Segura main building at 20:00 on Friday 22 June 2001. The bar is open thereafter.

## **Move to Cordoba**

The first task at Cordoba is planned for Saturday 23 June evening. It is quite far from Beas de Segura to Cordoba, but everybody has all day to get there. All pilots should ensure they are on site and ready to fly a precision task by 19:00.

## **How tasks will be run**

Tasks set will be very dependent upon the weather. Nil or very light winds along the route are almost guaranteed in the early morning, but after 10:00 or 11:00 are quite unpredictable. Pilots should expect an 07:00 takeoff for a navigation task every day. Some days, depending on weather and location there will be a late-morning task, and every evening there will be a precision task "for the people". It gets dark at about 22:00.

We will usually be based at the nearest "Piscina Municipal" (Swimming pool) where everybody can relax for a few hours. Pilots are strongly recommended to get into the local habit of taking a siesta in the afternoon.

Notice of briefings will be put on the official notice board as early as is practicable. The main briefing of the day will usually be held at 18:30, which will cover all the tasks planned for the following 24 hours. Briefings are for ALL pilots. Briefing sheets will be made available one hour before the briefing and all pilots are expected to be familiar with the proposed tasks before the briefing. This means the actual briefings can be kept as short as possible and we can do more flying. Pilots are also reminded that any question made at the briefing but already answered in the briefing sheet is a stupid question.

|| Pilots who delay the course of the championships by arriving late to briefings, fuel control Etc. WILL be penalised. ||

Competitors should ensure they have stocks of fuel and oil at the beginning of each day sufficient for three or four tasks. In some locations the nearest fuel supplies are quite far away.

Start order of tasks (when there is not a takeoff window) will usually be run in reverse current championship order. Every effort will be made to produce scores quickly. Some new techniques in the operation of tasks will be tried in order to achieve this.

## **Flags**

A system of flags will be used to indicate certain events. The flags will be next to the HQ

|| A GREEN flag indicates the takeoff window is open. Pilots may only takeoff for a task when the yellow flag is flying. ||

|| A YELLOW flag on permanent display means pilots may free fly in the local area. The director wishes to encourage free flying when possible. Pilots MUST NOT fly out of sight of the airfield or practise for any task ||

already briefed (eg a precision landing, fast slow or kicking sticks task) or they will receive a penalty. They must land as soon as the green flag is withdrawn.

A RED flag indicates there will be a short briefing on the next hour or half past the hour. ie If a red flag is raised at 10:05 there will be a briefing at 10:30. If a red flag is raised at 10:40 there will be a briefing at 11:00. This system is expected to be used mainly in cases where the weather forces an alteration to a plan already briefed. Pilots are expected to communicate to other teams that a red flag is flying.

### ***Decks, airfield boundaries and no-fly zones***

Decks will vary from location to location. In some places we will be using the traditional 100m decks, in other places this will be impractical and unless otherwise briefed the "deck" will be considered to be the area within 100m of a designated central marker. (Usually a windsock).

Airfield boundaries will either be the boundary of the field or beach in which the deck is situated, or the area within 250m of the designated central marker (whichever is less).

No fly zones will be briefed as necessary. A no fly zone is created for only one reason: **your safety**; in locations where there is a lot of other aircraft traffic. PPG's may not fly AT ANY TIME in a no fly zone. Penalty 20% task score for survivors. Repeated infringements = disqualification.

### ***Full Schedule***

#### **Monday 18 to Friday 22 June, Beas de Segura**

Registration, practice Etc.

#### **Friday 22 June, Beas de Segura**

**18:00** First general briefing and briefing for tasks 1 & 2

**20:00** Opening ceremony for microlight championships (all classes).

#### **Saturday 23 June, Cordoba**

**19:00** Pilots should be on site at Cordoba ready to fly task 1 (precision).

Notes:

1) Beas de Segura to Cordoba by road = c.215 km

#### **Sunday 24 June, Cordoba**

**07:00 - 11:00** Local area navigation task

**12:00 - 17:30** Possible local task

**18:30** Briefing for next 24 hrs tasks

**19:30 - 21:00** Precision task

#### **Monday 25 June, Cordoba**

**07:00** Takeoff window opens for navigation task to La Puebla de los Infantes

#### **Monday 25 June, La Puebla de los Infantes**

**11:00** Close of task window

**12:00 - 17:30** Possible local task

**18:30** Briefing for next 48 hrs tasks

**19:30 - 21:00** Precision task

Notes:

1) Cordoba to Puebla de los Infantes by road = c. 79 Km, by air: 60Km

#### **Tuesday 26 June, Puebla de los Infantes**

**07:00** Takeoff window opens for navigation tasks to Sevilla (Tablada) via Villanueva del Rio y Minas

#### **Tuesday 26 June, Sevilla (Tablada)**

**21:00** Window closes for navigation task

Notes:

1) Puebla de los Infantes to Villanueva del Rio y Minas by road = c. 49 Km, by air: 28Km

2) Villanueva del Rio y Minas to Sevilla (Tablada) by road = c. 60 Km, by air: 45Km

**Wednesday 27 June, Sevilla (Tablada)**

**07:00 - 11:00** Local area navigation task

**12:00 - 17:30** Possible local task

**18:30** Briefing for next 24 hrs tasks

**19:30 - 21:00** Precision task

**Thursday 28 June, Sevilla (Tablada)**

**07:00** Takeoff window opens for navigation task to Lebrija

**Thursday 28 June, Lebrija**

**10:30** Window closes for navigation task

**12:00 - 17:30** Possible local task

**18:30** Briefing for next 24 hrs tasks

**19:30 - 21:00** Precision task

Notes:

1) Sevilla (Tablada) to Lebrija by road = c. 63 Km, by air: 47Km

**Friday 29 June, Lebrija**

**07:00** Takeoff window opens for navigation task to Sanlucar de Barrameda

**Friday 29 June, Sanlucar de Barrameda**

**10:30** Window closes for navigation task

**12:00 - 17:30** Possible local task

**18:30** Briefing for next 24 hrs tasks

**19:30 - 21:00** Precision task

Notes:

1) Lebrija to Sanlucar de Barrameda by road = c. 34 Km, by air: 30Km

**Saturday 30 June, Sanlucar de Barrameda**

**07:00** Takeoff window opens for last task (Navigation or precision or economy)

**12:00** Final scores closed

**21:00** Prize giving ceremony & party.

**Sunday 1 July, Sanlucar de Barrameda**

**09:30** Buses depart for WAG closing ceremony in Jerez 11:00

And finally, a personal note from Richard Meredith-Hardy, PPG Competition Director.

Most of you will know that I have long experience of competing in microlight competitions, was director of the World Air Games PPG championships in 1997, the World Cup in 1998, the World championships in 1999, and was a competitor at the European PPG championships in 2000.

I am therefore aware of all the methods competitors may employ to improve their scores besides simply flying well.

All pilots should note the opening paragraph of the local regulations: "*The purpose of the championships is to provide good and satisfying contest to determine the champion in each sub-class and to reinforce friendship amongst pilots and nations*".

One particularly distasteful technique is one that can be described as "the tactical protest" where pilots or teams attempt to discredit other pilot's performances in an attempt to improve their own score or that of their team.

I consider this type of protest to be extremely unsporting; it neither enhances the competition nor reinforces friendship between nations.

If such protests are made while I am director of this championships then the applicant must be certain the evidence supporting his case is **extremely** good because I will have **no hesitation** in applying penalty 1.13.2.a in the case of false claims. I want to see the best pilots win, NOT the best politicians. Good luck!



# PPG



Beas de Segura, Cordoba, La Puebla de los Infantes,  
Villeneuve del rio y Minas, Sevilla, Lebrija, Sanlucar de Barrameda.  
Andaluća, 18 June - 1 July 2001

# CAMERAS AND MAPS

AVAILABLE IN  
REGISTRATION  
OFFICE

FROM 19:00  
21 June



# PPG



**Beas de Segura, Cordoba, La Puebla de los Infantes,  
Villeneuve del rio y Minas, Sevilla, Lebrija, Sanlucar de Barrameda.  
Andalućia, 18 June – 1 July 2001**

## Kodak EZ200 Digital Cameras

Tests have been conducted with these cameras and it has been agreed they are suitable for use in these championships. Below is some guidance as to their use and the procedures which will be used in the championships.

Those items in this document marked with double sidebars are classified as regulations supplementary to the published local regulations.

### Controls

There are four controls on the camera.

1. **Power:** This is used to switch the camera on and off. It switches on by default in the "HQ" mode which is the mode the camera should always be used in.
2. **Mode:** This switch is disabled and taped over. To prevent internal damage the tape **MUST NOT BE REMOVED**.
3. **The large button:** Press this to take a photo. After taking a photo **ALWAYS** check the LCD counter has advanced by one.
4. **The lens:** This can rotate and should be taped in position. The proper position is at maximum clockwise rotation in an indent against a small picture of 2 mountains. A similar picture in the LCD display should **NOT** be flashing. (A photo will not be taken if it is, and the counter will not advance).

Additionally there is a plug on the back of the camera for loading the images to a computer. Ideally this should be taped over to prevent ingress of dirt.

### Performance

Shutter speed and exposure is similar to any simple "point and shoot" camera. There is no apparent delay between pressing the button and the photo being taken. (In a quiet environment a "click" sound can be heard when the photo is taken). There is a delay of one or two seconds before the next photo can be taken.

Unlike many digital cameras, it appears perfectly possible to take many hundreds of pictures with this camera on the same set of batteries. If not used, the camera switches itself off after 10 or 15 minutes, the **POWER** switch should be pressed to start it again. A test has indicated that at least 500 photos can be taken over a period of several weeks on a single set of batteries so the new set supplied in the camera should last the entire championships without problems.

No more than 40 pictures should be taken. The camera may become unreliable after this. 40 is more than enough for one task flight. It is not possible to alter the order of photos taken. With the **MODE** switch disabled it is also not possible to delete or overwrite any photos which have been taken.

The camera appears to be perfectly robust but should be handled as carefully as any other camera. Do not allow it to get hot. The camera strap has been proven to be very strong. It is suggested pilots tie a longer loop of string to this rather than to any other part of the camera.

### Procedures for use

All cameras will be numbered with the pilots' competition number. Each pilot will use the same camera for the duration of the championships for use as their "primary" turnpoint camera. Pilots not using the camera with their competition number on it may score zero.

Cameras will be made available during the practice period for testing by each pilot. The photos will be loaded onto a computer for viewing at published times. The cable and software for downloading pictures will **NOT** be made generally available.

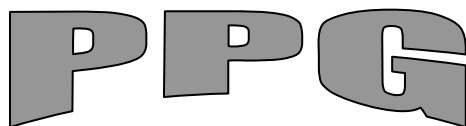
All cameras must be returned to the organization before the start of the championships. After this they will only be made available before a task in which they are required.

Before they depart on a task, pilots should ensure they photograph the task board and their competition number in the normal way.

Pilots are strongly advised to carry a "secondary" 35mm camera for use as evidence in the case there is a failure of the supplied "primary" digital camera.

Every digital camera **MUST** be returned to the organization at the briefed time, or by the latest, before the close of the task (whether the pilot has flown or not). Failure to do so without exceptionally good reason will incur a penalty. Secondary films should be handed in at the same time. These will be labelled and, in the normal way, only processed if there is a technical problem with the 'primary' digital photos.

Photos will be stored by the organization in such a way that they cannot be inadvertently mixed up or deleted.



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## INFORMATION ABOUT THE MANUFACTURER'S TEAM TROPHY

The WAG organisation are introducing an exciting new concept into the 2001 World Air Games Microlight championships – a team trophy independent of the competitor's national affiliation: The **Manufacturer's Team Trophy**. (MT Trophy)

This is an exciting idea – maybe this championships there is not much manufacturer interest... but if you can say to your manufacturer you were in his winning team at the World Air Games.... maybe he will be a little more interested in supporting you next time.....

All pilots who have not yet declared which manufacturer's team they wish to be in are encouraged to pop down to registration and record it on the computer.

The following is the status at thursday morning.....

### DAKR

- 5 [Zdenek ANDRLIK](#) (CZE)
- 43 [Vit HERMAN](#) (CZE)
- 2 [Vladimir PROCEK](#) (CZE)

### Fresh Breeze

- 11 [Alexander BOGDANOV](#) (RUS)
- 4 [Thomas KELLER](#) (DEU)
- 20 [Vladimir MAKURIN](#) (RUS)

### PER IL VOLO

- 33 [Diego CECCHETTO](#) (ITA)
- 17 [Leszek MANKOWSKI](#) (POL)
- 39 [Massimo ZARAMELLA](#) (ITA)

### Reflex Wings

- 37 [Mike CAMPBELL-JONES](#) (GBR)
- 35 [Arnon LUFI](#) (ISR)

### Not a member of any team

- 18 [Rafael AROUSH](#) (THA)
- 49 [Paul BAILEY](#) (GBR)
- 16 [Djoko BISOWARNO](#) (IDN)
- 40 [Pavel BREZINA](#) (CZE)
- 55 [Vadim BUKHTIYAROV](#) (RUS)
- 48 [Vincent CECCARELLI](#) (FRA)
- 32 [Alexander CHAKOVETS](#) (RUS)
- 36 [Man Pii CHEON](#) (KOR)
- 47 [Ronan CHOLLOU](#) (FRA)
- 22 [Vassily DIATCHENKO](#) (RUS)
- 52 [Francisco ESCOLAR ROBLES](#) (ESP)
- 9 [Radim FRANK](#) (CZE)

- 56 [Desong GAO](#) (CHN)
- 28 [Marco Antonio GUILLERMO BOUCHSPIES](#) (MEX)
- 21 [Krzysztof KACZYNSKI](#) (POL)
- 38 [Seong Young KIM](#) (KOR)
- 29 [Jiri KOUDELA](#) (CZE)
- 19 [Somsak KWAMCHAROEN](#) (THA)
- 57 [Liuling LIANG](#) (CHN)
- 26 [Eric LIE](#) (IDN)
- 50 [Maurizio LIVEROTTI](#) (ITA)
- 10 [Paul MAHONY](#) (GBR)
- 54 [César MALDONADO GARCÍA](#) (ESP)
- 3 [Dani MARTINEZ](#) (ESP)
- 7 [Ramon MORILLAS](#) (ESP)
- 41 [Nino MUELAS PEÑA](#) (ESP)
- 34 [Mauro PIETRUCCI](#) (ITA)
- 46 [Jerome POMMIER](#) (FRA)
- 31 [Igor POTAPKINE](#) (RUS)
- 12 [Saman PROMNAREE](#) (THA)
- 53 [Francisco RENEDO FENÁNDEZ](#) (ESP)
- 30 [Glen SHELUCHIN](#) (AUS)
- 24 [Bing SUTANTO](#) (IDN)
- 25 [Eddy SUTRISNO OTTO](#) (IDN)
- 27 [Claudia SZILAGYI](#) (ROM)
- 45 [Jean Luc THUIN](#) (FRA)
- 42 [Michel TOUITOU](#) (FRA)
- 44 [Michel VIGOUROUX](#) (FRA)
- 15 [Thomas WEISSHAAR](#) (DEU)
- 23 [Purwo WIDODO](#) (IDN)
- 51 [Jinbao ZHANG](#) (CHN)
- 14 [Ryszard ZYGADLO](#) (POL)

All the rules are described in Annex 1 to the local regulations.



# PPG



Beas de Segura, Cordoba, La Puebla de los Infantes,  
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# BRIEFING FOR ALL PILOTS 13:30 VERY SHORT

# Briefing room in HQ building





# PPG

**Beas de Segura, Cordoba, La Puebla de los Infantes,  
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## TEST TASK

- *This task is not in the local regulations*
  - *Unlimited fuel*
  - *Photography required*
  - *Briefing: Upon demand*
  - *Official map; 1:50:000 Beas de Segura.*
  - *Takeoff window: Any time between 12:00 Wednesday 19 June and 21:00 Thursday 21 June*
  - *Task closes: 21:00, 21 June*
- 

## NAVIGATION

### Objective

To test photographic skills

### Description

Pilots fly to as many of the 17 given points as they like, photograph them, and return to the deck.

### Special rules

Photo sector centreline is as always, looking towards the destination airfield. (In this case Beas de Segura)

Pilots must return all cameras to the office as soon as they have completed the task, and in all cases no later than 21:00 Thursday 21 June.

### Scoring

None, but pilots will be able to view their photographic efforts.

