

**LOCAL REGULATIONS FOR
17th FAI EUROPEAN CLASS 1 HANG GLIDING CHAMPIONSHIPS – AGER 2010
(Approved by CIVL, November 2009)**



AT : SIERRA DEL MONTSEC, AGER (LLEIDA) - SPAIN

ON : JULY 8 TO JULY 24, 2010

ORGANISED BY: DELTA CLUB BARCELONA on behalf of:

**The REAL FEDERACIÓN AERONAUTICA ESPAÑOLA
and**

The FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE

(E-Mail) Address of the organising National Aero Club: fae@rfae.org
.....

**(E-Mail) Address to which any correspondence should be sent in advance of
the event: info@ager2010.com and info@juakiair.com**
.....

Website where information about the competition can be found:
..... www.ager2010.com

These local regulations are to be used in conjunction with General Section and Section 7A of the FAI Sporting Code. Reference numbers for Section 7A used in this text should be crosschecked with the latest edition of Section 7A.

A. PURPOSE

The purpose of the championships is to provide safe, fair and satisfying contest flying in order to determine the champion in each Class and to reinforce friendship amongst pilots and nations. **(2.2)**

B. PROGRAMME (check on website for timings & latest information):

Registration & Training8 to 10 July, 2010

Practise Task (Details of timing at registration) 10 July, 2010

First team leader briefing (at HQ)11 July, 2010

Opening Ceremony11 July, 2010

First Competition Briefing12 July, 2010

Mandatory Safety Briefing11 July, 2010

(It is mandatory for all pilots to attend the Safety Director's briefing (2.6.22) prior to the commencement of flying; pilots who fail to do so will not be allowed to compete). (2.6.22 & 2.17.1).

Contest Flying Days12 to 23 July, 2010

Closing Ceremony & Prize Giving24 July, 2010

Competitors are reminded that they are expected to attend the Opening and Awards ceremonies (S7A 14.2.2)

Training on site Generally unrestricted through year (check for competitions)

C. OFFICIALS

Competition Director	José Manuel (Juaki) Sánchez García
Safety Director	Tony Webb
Deputy Competition Director	Rhona Webb.....
Organisation Director	Salvador Mogas Filva
Competition Office Manager	Anna Mogas, Maria Mogas & Laura Roca
Meteorologist	Ignacio Ruiz Guardiola
Take-off marshals	Ignacio Ruiz Guardiola & Carlos Ganter Lluís Artigas
Goal marshal	Alba Xandri & Bea Garcia
Scoring	Ivan Ripoll & Alex Coca
International Jury	President
	Members
	John Aldridge (UK)
	Karolina Kociecka (POL)
	Nikolay Yotov (BUL)
Stewards	Flip Koetsier (NL)
	Claudia Mejia (COL)

1. ENTRY

1.1 The Championship is open to all Member and Associated Member countries of the FAI who may enter any number of pilots not exceeding 6 plus 2 additional women The 6 will be those pilots who qualify for their national team

in open selection and there may be up to 2 additional women in the team
(3.2.6)

- 1.1.1** All European NACs are invited initially to submit a team of up to 5 + 2 females by 31 January 2010. A deposit of 100 euros per pilot must be received by this date to reserve the places.
- 1.1.2** If the total number of pilots registered, with deposits paid, at 31 January 2010 does NOT exceed 150, an extra allocation of 1 pilot per team shall be offered to nations, in descending order of the nation WPRS ranking (on 1 February 2010) to bring the total maximum number of pilots to 150. In this allocation process Spain, the host nation, will be treated as equal to the nation ranked highest in the WPRS.
- 1.1.3** Pilots entered in the extra allocation process will not form part of the national team until all nations who entered a full team of 5 pilots initially have been offered a further place .
- 1.1.4** Any places that subsequently become available will be offered according to this allocation process until the allocation deadline of 20 May 2010 or until the maximum competitor number of 150 has been reached. .
- 1.1.5** If any places remain available after May 20th, entries will be invited from non-European NACs for suitably qualified pilots. The places will be allocated according to the WPRS order (Feb 1st) with one female pilot for each four male pilots. **(3.3)**
- 1.1.6** The maximum number of pilots entered by each nation shall not exceed 6 + 2 and the maximum team size shall not exceed 8.
- 1.2** Entries must be made on the official online Entry Form by the following registration dates:
 - A: NAC/Nations registrations – nomination of team of up to 5+2 pilots by: 31 January 2010. Deposit of 100 euros per pilot must be paid by: 31 January 2010. Confirmed pilot names, and payment in full to be made by: 1 April 2010.
 - B: Allocation round to begin on: 1 February 2010.
Payment in full for additional pilots to be made within 20 days of offer, and by 20 May 2010 latest.
Entry will be confirmed upon receipt of full payment.
- 1.3** The standard entry fee is **400 euros** per pilot. Team Leader & assistant fee is 200 euros.
A special package for drivers, assistants and partners will be advertised on the competition website, and payable at registration.
For late entry fee payment (after the entry deadline) 10% surcharge will be applied.

Applications, with fees paid, not received by the entry deadline may be refused.

1.4 For the above mentioned fee the organiser will conduct the Championships and provide **(2.5.1)**:

- One map or chart of an adequate scale which will clearly indicate ALL take offs, landing fields, necessary turn points, restricted airspace, off limit landing areas and any other restricted areas. The chart will have a clearly visible grid that matches the GPS co-ordinates used for the competition
- Contest numbers and identity badges.
- All competition papers.
- Packed lunches on each flying day.

1.5 The following NAC's will pay their entry fee (including the deposit specified in 1.1.1) directly to the CIVL/FAI account:
Austria, Italy, United Kingdom **(7.1.3)**

The FAI account details are:
Credit Suisse Private Banking
Rue du Lion d'Or 5-7
Casa postale 2468
CH-1002 Lausanne
Switzerland

Account name : Federation Aeronautique Internationale
Account number: (Euro) 0425-457968-32
IBAN code: CHF31 0483 5045 7968 3200 0
Swift code : CRES CHZZ 10A

1.6 REFUND POLICY: In the event of a paid pilot withdrawing from the competition before 1 May, 2009, and who cannot be replaced by a qualified pilot from that nation, a minimum refund of 250 euros will be offered. Cancellations received after this date will not be eligible for a refund except at the organiser's discretion.

2. CHAMPIONSHIP VALIDITY

2.1 To be valid the championship must have not less than 8 participants in a Class representing not less than 3 European countries with entry fees paid and available to fly on the first day. **(2.4.3)**

2.2 The title of European Champion shall only be awarded if the sum of the daily winner's scores is equal to, or more than 1500 points, as determined by the GAP scoring formulas. **(2.4.6.1)**

3. GENERAL COMPETITION RULES

3.1 REGISTRATION

On arrival the team leader and competitors shall report to the Registration office (see times above) to have their documents checked and to receive supplementary regulations and information. The end of the official Registration period is considered to be the official start of the championship. **(2.13)**

3.2 The following are required:

- Pilot qualifications
- Evidence of competitor's nationality
- Pilot's valid FAI Sporting License
- Receipt for payment of entry fees by the closing date
- Satisfactory evidence of glider airworthiness **(12.3.1)**
- Certificate of Insurance. Valid third party liability insurance. Each pilot must have a valid third party liability insurance (Euro 1.000.000) and emergency rescue and repatriation insurance.
- GPS of each competitor for registration
- Pilot, team leader (if any) and driver mobile telephone numbers. Any other contact numbers available. All pilots will be required to sign the liability waiver at Annex- C

3.3 The registration office will be open from 9:00 to 12:00 morning and 14:00 to 20:00 afternoon on days 8, 9 & 10 July, 2010.

3.4 At the first team leader briefing task advisory and safety committees will be chosen. **(2.6.3 and 2.6.4)**

3.5 The organiser takes no responsibility for pilots or third parties. Transfer to launches and retrieval is at the pilots' own risk.

4. WIND SPEED (2.17.13)

The maximum wind speed in which a task shall be flown is 37 km/hr. This shall be measured at the launch site.

5. EQUIPMENT

5.1 Communication equipment.

Radio transceivers are permitted. Radios are for communication between competitors, team leaders, drivers and the organisers. Only frequencies allocated by the organisers may be used. All pilots and crews must submit their team frequencies and mobile telephone numbers to the competition director. This information will be used by the competition director for safety purposes. **(2.19.2)**

5.2 Numbers will be provided and are required on the underside of the right hand side of the pilot's wing (number points to leading edge). **(2.12)**

5.3 Helmets

All pilots must wear helmets certified to EN966 when flying.

5.4 GPS equipment

Each pilot must ensure that he/she has equipment that is secure and compatible with the CIVL Flight Scoring (FS) GPS software category that is to be used. All pilots must, as a minimum, fly with one GPS unit capable of recording GPS altitude as part of the tracklog. Backup GPS units must also be 3D. 2D GPS units are no longer permitted in Category 1 events for providing flight evidence.

6. TAKE-OFF METHODS

6.1 Foot launch from hill sites

Type of launching will be an open window (free take-off without any set launch order) but an **ordered launch may be introduced** if considered necessary by the Meet Director.

Ordered launch rules: If we decide to use ordered launch on the first competition day, pilot launch order will be determined by the 1st July 2010 WPRS ranking and thereafter will be based on the **overall** provisional results. The order of the top 30 from the WPRS on the first day and from the overall provisional results thereafter will be reversed so that the pilot in 30th place will launch first. Launch marshals will call the order of launching. Pilots must be completely ready to fly when the launch marshal calls him/her to move into the launch lane. Pilots not ready will have to launch after all remaining pilots waiting to launch in that lane.

Once the top 30 have launched the launch order will revert to normal order. Pilots will be spread evenly over the launch lanes and must launch from the lane they are allocated to (see launch diagrams) unless otherwise directed by launch marshals. A pilot may choose to wait on launch until a push is made from another pilot at which time the normal push rules apply. **Once the main launch window opens, pilots must be ready to launch in case of an immediate push.** If ordered launch is to be used, this will be announced at the team leader briefing every morning

The take off "push" system in Section 7A will be used **(2.24.6) but in an ordered launch any pilot who has chosen not to launch in his turn may not subsequently "push" in that task.**

Only pilots ready to take off in the launch lanes are allowed to push.

6.1.1 EARLY LAUNCH WINDOW:

To aid pilots further back in the setup area to launch earlier, there will be an early launch option prior to the main launch window. This may be discontinued during the competition if the meet director and launch staff feel this system is not working well. The guidelines are:

- 9 pilots **outside the top 30** from the overall provisional results (1st July 2010 WPRS order for first task) may use this option. Pilots will be divided evenly between the start lanes.

- There will be 10 minutes of early launch unless specified otherwise at the task briefing;
 - Pilot names must be submitted between 8.30 – 8.45am at HQ – no names accepted on launch. Set up order will be in the order the first 9 names are randomly drawn (no.1 drawn sets up in Lane 1, no.2 in Lane 2, no.3 in Lane 3, then no.4 in Lane 4, no.5 in lane 1, etc).
 - The 9 pilots will rig in the launch lanes.
 - Early launch pilots must launch in the time specified, otherwise they can be pushed by the main launch pilots in which case they will have no decision time and must launch within 30 seconds of uninterrupted launchable air. If the decision is not to launch, a pilot must queue behind all pilots remaining to launch (names will be put on a list).
 - Pilots nominated in the early launch list are not permitted to withdraw from this list.
 - During early launch a push in a lane applies to that lane only.
- The main launch will begin at the time specified during task briefing or may commence immediately after all early launch pilots have launched.

6.2 Take-off sites:

Roper launch – 1352 m ASL. A ridge with south/south west launches on top – 4 start lanes on each side, shale rock on the south west slope. Paved roadway to the top – accessible by 2WD.

6.3 Set up on Ager-Roper launch for the first competition day will be based on the WPRS ranking list (current 1 July 2010 ranking), and thereafter on the total overall provisional results. Numbers indicating rigging position will be placed on launch. Any competing glider rigged in start lanes must be moved out to the correct setup position before the pilot briefing.

6.4 In the event of dangerous overcrowding in the air around launch the competition director may close the launch temporarily until congestion has eased.

7. WAYPOINTS

7.1 Cylinder starts will be used and these may be either entry or exit. The type of start and the dimensions may vary from task to task and will be specified at each task briefing **(1.6.7.9)**

7.2 Given the possibility of low cloud bases around the start gate, at any task briefing the meet director may specify an altitude limit for crossing the start line into the speed section of the task, i.e. either entering or exiting the start cylinder, depending upon the type of start used for that task. Penalties for infringements of these limits shall be

$$\text{Penalty (in points)} = \frac{T \times H^2 \times (0.001 \times \text{Task Winner's Score})}{100}$$

- T = Temporary factor of ½
- H = Pilot's height (in metres) above start limit

The maximum penalty that may be applied is equivalent to 50% of the task winner's score. Any pilot who does not supply a 3D track log for this section of the task will receive the maximum penalty for start height infringement **(2.29.2.1)**

7.3 Turn Points will be cylinders of 400m radius unless otherwise specified at the task briefing **(1.6.8)**

7.4 Goals will be a virtual line on either side of the goal coordinates, unless otherwise specified at the task briefing. Wherever possible there will also be a physical line with wind indicators at each end placed over the virtual line coordinates (or as close as possible to) as a flight reference for pilots. If a goal cylinder is to be used, this will be announced in the daily briefing and written on the task board.

8. RE-LAUNCH

8.1 A competitor will be allowed one take-off only to attempt the task within the stated take-off period. Marshals will be in the start lanes to carry out checks, which all pilots must allow them to do. At no stage is a pilot permitted to launch without having been given permission by the launch director, who is present at his/her lane.

8.2 A failed take-off attempt or safety problem arising immediately after take-off which results in a landing will not count as one of the permitted number of take-offs. Pilots must report to the Start Marshal before the second take-off attempt. **(2.26.1)**

9. TASK PERIOD

9.1 Times of window open for take-off and time for the closing of the window, turn points and last landing will be displayed in writing. Any window extension time will also be displayed in writing.

9.2 The minimum period of time that the launch window will remain open for the day (**launch**) to be considered valid is 45 seconds per pilot divided by the number of launch points that can be used **(2.24.1)**.

10. SCORING AND FLIGHT VERIFICATION

10.1 Scoring will be done according to the FS software and the GAP 2008 scoring formula. **(5.2.1)**

GAP parameters will be announced at the first team leader briefing.

The GPS map datum is WGS 84 and the format to be used is

hddd,mm.mmm' (degrees, minutes, decimal minutes), offset: + 02.00 (hours).

- 10.2** 3D GPS track log evidence is the only way to verify and provide data for flights. To be considered valid, the GPS track log has to comply with the current requirements in Section 7A of the FAI Sporting Code, chapter 16.
- 10.3** Team scoring will be in accordance with S.7A **(5.7.2)** with 3 scoring pilots in each team. All women entered in the championship will also be eligible to score within these limits. The scores of teams with fewer than 3 pilots shall be the scores of all participating pilots.
- 10.4** For scoring purpose, where guest pilots (i.e. those from other continental regions) compete in continental championships they do not appear in scores for that championship, but they are not to be filtered out during the scoring calculations as they will have affected the way some championship pilots fly the task **(5.7.1)**
- 10.5** Scoring a stopped task. A task which has been stopped but not cancelled shall be scored if at least 1 ½ hours have elapsed since the first valid start is taken by a competing pilot or at least 1 pilot has achieved goal. Pilots will be scored up to the point in time when the task was stopped, less a specified “score back” time; this score back time is equal to the time between start gate windows or a minimum of 15 minutes in the case of a race task **and will be applied to all pilots whether in goal or not. (5.5.8)** Pilots in the air who have been notified that the task has definitely been stopped or cancelled are requested to open their harnesses and cycle their legs in the air to indicate to other pilots that the task has been stopped. Pilots who do this when the task has not been stopped or cancelled will be penalised at the meet director’s discretion. Each individual competitor is the best judge of what constitutes safe conditions for that competitor. Each pilot is completely responsible for his/her own safety at all times.
- 10.6** Each competitor is obliged to complete a landing verification form, sign out on the sign-out list in the HQ after each flight and to submit it to the scorer before GPS track download. Pilots must also report back after stopped tasks.
- 10.7** A pilot who lands (or limits his flight) to assist another pilot in distress shall be scored for the day This score shall be the average day-weighted of what he scored in the previous rounds, or the average pilot score if this happens on the first task. However, as the meet progresses that score will change to take into account his average day-weighted scores of the whole meet so the score will be adjusted after each task. The competition director may also award extra points. **(5.6.1)**
- 10.8** Pilots may use any model of GPS unit that is compatible with the flight verification software to be used at this event but must, as a minimum fly with one 3D GPS. Pilots with other models may be required to provide hardware, software and methodology for downloading.

11. PENALTIES (5.8)

11.1 CLOUD FLYING by competitors is illegal and un-sportsmanlike. Competitors who fly into clouds will incur a penalty for the day. A pilot is deemed to have flown into a cloud if he/she is observed by a meet official or by a nearby air marshal going into and disappearing into a cloud, or: if 2 pilots from 2 different countries/teams witness the accused going up into the cloud and completely disappearing from their view, and attest to this fact in writing, and if barograph or 3D GPS traces from the accused show the accused significantly above nearby pilots at the time of the incident. If the accused cannot produce a barograph trace for that day or a 3D GPS track log, only 2 witness statements are required. It is highly recommended for all competitors to fly with a recording barograph. Witnesses should press Mark/Enter when they witness a pilot going into a cloud. Any pilot found to be deliberately supplying false information about another pilot with respect to cloud flying will be removed from the competition. It is recommended that a pilot sucked into cloud who did not have the intention of gaining an advantage should perform a figure 8 manoeuvre once out of the cloud and fly back along the course line until the extra height gained is lost before continuing on course so that other pilots can see it had not been intended. S7 penalties apply for verified infractions. For the first infraction the pilot will score zero for the day and a further infraction will result in the pilot being excluded from the remainder of the competition **(2.17.10 & 15.5.8)**.

11.2 CONTROLLED AIRSPACE:

Pilots are expected to familiarise themselves with all controlled airspace and any competition airspace limits in the vicinity of course lines from the maps and information supplied. The onus is on the pilot at all times to prove that he/she has not infringed on airspace. The track logs of at least the top 20 pilots for each task will be checked for airspace infringement. Other random checks will also be made. Penalties for verified infractions will be applied as per Section **7A 2.29.2 & 15.5.8**

Competition Altitude Limits will be shown on the competition maps and all restricted areas will be clearly marked. Altitude from the pilot's track log will be checked using barometric altitude using the standard pressure setting of 1013.25hPa and verified using the scoring software. Primary units will be meters.

It is the pilot's responsibility to understand whether his instruments record and/or display barometric or GPS altitude, or both, and what corrections are made automatically. He must ensure his instruments are set correctly before he flies. A QNH pressure altitude for the day, with corresponding height, will be posted on the Task Board each day.

Penalties for verified infractions of controlled airspace or competition altitude limits will be applied as per Section **7A 2.29.2.1 & 2.29.2.2**

See Annex on Altitude Verification for further information

11.3 INSTRUCTIONS FROM OFFICIALS:

Failure to follow directions from meet officials as soon as possible after they are given may result in penalties being applied at the meet director's discretion.

11.4 ABUSIVE BEHAVIOUR towards meet officials or other competitors will not be tolerated and penalties will be applied at the meet director's discretion **(Chapter 11 S.7A)**.

11.5 REPORTING BACK LATE: For each task there will be a latest report back time stated. For safety reasons, pilots who have not notified organisers of their landing by this time will receive a warning for a first infringement, for a 2nd infringement will lose 10% of the day winner's score and will score zero for any further infringements (unless a reasonable explanation is offered as soon as possible to the Meet or Safety Director). Penalty points may also be given for late GPS downloads.

12 REST DAYS (2.21)

The competition director may declare a rest day after not less than four days of consecutive flying, unless this is the last day of the competition. The policy on rest days shall be declared before the first competition day **(2.21)**

13 COMPLAINTS AND PROTESTS

The scorer shall publish provisional task results in the evening of the day the task was flown. When this is not possible (e.g. due to late retrievals), they will be published as close to **8.00am** the next day as possible. Competitors are recommended to request correction of mistakes as soon as possible. A complaint in writing may be made to the Competition Director, preferably by the team leader, to request a correction. The time limit for complaints is **12 hours** after publishing of the **provisional results, except for the last competition task when it is 2 hours**.

If the complainant is not satisfied with the outcome, the team leader or pilot may make a protest in writing to the Competition Director or her/his deputy (See General Section Chapter 5 and Section 7 Chapter 13).

The time limit for protests is **12 hours** after publication of the provisional results or the notification of the result of the complaint, except that after the last competition task it is **2 hours**.

The protest fee is 50 euros. It will be returned if the protest is upheld. **(2.4.7)**

Annex A to Local Regulations

CERTIFIED GLIDER STATEMENT

I, the undersigned, declare that the Class 1 glider (make) . (model) I will fly in the 17th FAI EUROPEAN CLASS 1 HANG GLIDING CHAMPIONSHIPS – AGER 2010, from 8 to 24 July, 2010 is certified by one or more of the internationally recognized certifying bodies (namely the DHV, HGMA or the BHPA). Furthermore I declare that it is in certified configuration and I undertake not to alter this configuration. I understand that I am the sole individual responsible for the integrity of my glider.

Signed on this date: _____

Signature of Participant

Printed name of Participant

Address of Participant: _____

Signature of Witness

Printed name of Witness

Address of Witness: _____

If your glider is not a certified model or is not in certified configuration

DO NOT SIGN THIS STATEMENT

but instead comply with Section 7A 12.3

Annex B to Entry Form

RELEASE OF LIABILITY, WAIVER OF LEGAL RIGHTS

Please read carefully. This is a release of liability, waiver of legal rights :

1. I am a participant in the 17th FAI EUROPEAN CLASS 1 HANG GLIDING CHAMPIONSHIPS – AGER 2010 Championships held at AGER – LLEIDA - SPAIN...from ...8 of July, 2010 to 24 of July, 2010 ("the Championships"). I acknowledge that participating in the Championships or any other activity related thereto (collectively, the "Events") involves INHERENT DANGERS, may be HAZARDOUS and involves RISK OF PHYSICAL INJURIES OR DEATH. I expressly assume all risks associated with participating in the Events, including, without limitation to direct participation in the Championships or in training sessions, accessing restricted areas, sharing area facilities with people not directly involved in the Events and travelling in and between the Events' venues. Despite all the risks, I voluntarily choose to take part in the Events. (Initials:.....)
2. In consideration of receiving permission to take part in the Events, I agree to release and hold harmless the contest organisers, the Spanish National Aeroclub, the property owners of the operation areas (including launch and landing areas), the Fédération Aéronautique Internationale and its Commission de Vol Libre, their respective affiliates, agents, officers, directors, owners, commission or jury members, contractors, volunteers, employees and insurers (collectively, the "Released Parties") from any and all claims I might make as a result of physical injury, including death, or property damage sustained in connection with the Events. I promise not to sue the Released Parties and agree that if anyone is physically injured or property is damaged while I am engaged in the Events, I will have no right to make a claim or file a lawsuit against the Released Parties. The provisions of this paragraph 2 shall not apply to misconduct determined to have been undertaken intentionally or recklessly. (Initials:.....)
3. This Release of Liability, Waiver of Legal Rights supersedes any other agreements or representations by or between the parties and is governed by the laws of Spain. I intend this document to be interpreted as broadly as possible. I agree that exclusive jurisdiction and venue for any legal action shall be in Spanish courts and such courts have personal jurisdiction. (Initials:.....)
4. If any part of this agreement is determined to be unenforceable under the applicable law, all other parts shall still be given full force and effect and the agreement shall be completed in respect of the aspects covered by the part which is declared unenforceable as to give effect to the intent herein expressed to the fullest extent permissible by law. (Initials:.....)

I HAVE CAREFULLY READ THIS DOCUMENT AND FULLY UNDERSTAND ITS CONTENTS. I AM AWARE THAT THIS IS A RELEASE OF LIABILITY, WAIVER OF LEGAL RIGHTS AND I SIGN IT OF MY OWN FREE WILL.

Signed on this date : _____

Signature of Participant

Printed name of Participant

Address of Participant : _____

Signature of Witness

Printed name of Witness

Address of Witness: _____

ANNEX C TO LOCAL REGULATIONS

ALTITUDE VERIFICATION

Introduction

For the purposes of altitude verification, the scorers will group GPS instruments into three broad categories:

Group 1: Instruments incorporating a pressure sensor to be able to record and/or display barometric altitude. (Some may also display GPS altitude)

Group 2: Instruments recording only GPS altitude

Group 3: Instruments (primarily Garmins) that incorporate a pressure sensor, such that the recorded altitude is a continuous updated combination of GPS height and barometric altitude.

Pilots should be aware of which altitude(s) each of his GPS units records and displays. Note that in some instruments there will be a difference between the pressure altitude height and the height displayed in flight. This can be up to 200 to 300m on a high-pressure, hot day.

GPS set-up

Group 1:

All the barometric instruments should be set at the task briefing, either with the predicted QNH for the day or with the take-off height (which then calculates the QNH automatically), displayed on the task board. It is highly recommended to set alti2 (if available) to QNE (1013.25hPa).

Group 2:

No special set-up. Pilots flying with GPS-only altitude units should be aware that there can be a difference between barometric and GPS altitude of up to 200 to 300m.

Group 3:

The auto-calibrate function must be switched off. And the unit must be calibrated to launch height or QNH taken from the task board.

Note: Restricted airspace will be indicated on maps provided.

Verification by Scorers (Using FSflight, SeeYou and CompeGPS)

To verify infractions of competition altitude limits, track log altitude data will be standardised using standard barometric altitude (Pressure Altitude) of 1013.25hPa.

Group 1:

Typically, all the Flytec/Brauniger instruments (Group 1) will download correctly and the Pressure Altitude will be recorded in the kml and igc track log.

Other barometric instruments in Group 1 will have altitude corrected to 1013.25hPa by the scorers ($1013.25 - \text{QNH} * 27\text{ft/hPa}$) to derive the actual (standardised) flight altitude.

Group 2:

Pilots with instruments recording GPS-only altitude: The difference between the GPS altitude and the pressure altitude will be derived by referencing track(s) from an instrument used on that task that gives both measures (eg Compeo+/6030). The pilot's GPS altitude will be adjusted using this difference. For some units, the scorers may have to factor in the ellipsoid/geoid difference as well.

Group 3:

Due to the nature of these instruments, it is essential that the auto-calibrate function is switched off, thereby recording true barometric altitude. They will be treated the same as Group 1 instruments. It is recommended that pilots flying with an instrument in this group, fly with a back-up GPS from another group. Pilots flying with only Garmins are likely to be subject to greater scrutiny and more frequent altitude checks.

Note: Restricted airspace will be indicated on maps provided.