LOCAL REGULATIONS FOR
12th FAI Women's World Hang Gliding Championship 2010
18th FAI World Hang Gliding Class 2 Championship 2010
5th FAI World Hang Gliding Class 5 Championship 2010

(Approved by Bureau November 2009, updated and ratified by 2010 CIVL Plenary, Officials list amended April 2010)

AT: TEGELBERG SCHWANGAU, GERMANY

Date: 08. May to 22. May 2010

ORGANIZED BY GERMAN HANG-GLIDING FEDERATION (DHV)

ON BEHALF OF THE FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE

Address of the organizer**:** **Deutscher Hängegleiter Verband e.V.**
Postfach 88
83701 Gmund am Tegernsee
Germany

E-mail-address to which any correspondence should be sent in advance of the event: **regina@dhv.de**

Website where information about the competition can be found**: http://www.dhv.de**

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 cross checked 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 champions in Class 5, Class 2 and Class 1 Women and to reinforce friendship amongst pilots and nations. They should also determine the champion national teams except in class 2, which will be an individual contest. **(2.2)**
The Meet Director and Task Advisory Committee (TAC) will be aiming for pilots to fly long tasks (only weather dependent) with a high number of pilots at goal.

B. PROGRAMME (check on website regularly for any alterations to times printed below):

Registration at HQ (IKARUS-Tegelberg) **– GPS coord's: 47° 34.066'N 10° 45.400'E** (WGS 84)

08. May	**9:00 – 12:00 & 15:00 – 18:00**
09. May	**9:00 – 12:00**

Pre-Competition sprog measurements (Class 1 gliders only) inside Tegelbergbahn buildings

-	**GPS coord's: 47° 34.066'N 10° 45.400'E** (WGS 84)
07. May	**10:00 – 17:00**
08. May	**8:00 – 17:00**

Training on site	**Generally unrestricted through the year (check for competitions)**
Practice task	**08. May (details of times at registration).**
Safety briefing for practice task	**08. May 9.00**
First team leader briefing	**09. May 9.00**
Mandatory pilot safety briefing	**09. May 15:30 at Kurhaus Tegelberg**

(A pilot who has not attended this briefing will not be permitted to fly a task until he/she has attended such a briefing).

Opening Ceremony	**09. May 2010 17:00h at Kurhaus Tegelberg**
Contest Flying Days	**10. - 21. May 2010**
Closing Ceremony & Prize Giving	**22. May - 10:00**

C. OFFICIALS

Competition Director	Heather Mull
Safety Director	Oliver Barthelmes
Safety Director Airfield	Horst Barthelmes
Deputy Competition Director	Dr. Dietrich Münchmeyer
Organisation Director	Dr. Dietrich Münchmeyer
Event Director	Benno Osowski
Competition Office Manager	Petra Aichele
Main Launch Director	Martin Becker
Airfield Launch Director	Dr. Dietrich Münchmeyer
Goal marshal	Klaus Speckenheuer
Scoring	Stanislav Velchev
Scoring Assistant	Peter Wild
Transport Manager	Franz Bucher, Tegelbergbahn
PR Manager	Rebekka Speckenheuer
Meteorologist	Volker Schwanitz
Competition Physician	Dr. Patrik Krös
Air Marshals	Bo Klint (DNK), Mart Bosman (NL)
FAI Steward:	John Aldridge (UK)
FAI Jury President:	Flip Koetsier (NL)
Members:	Kurt Meyer (GUA)
	Davor Novak (CRO)
Sprog measurement	Hannes Weininger, Christof Kratzner

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Appendices

1 ENTRY

1.1 Pilots and team size

The 2010 World Championships are open to all member and associated member countries of the FAI who may enter up to eight Class 5 (one six person team plus two additional individual members), four Class 2, and up to ten Class 1 (women) (one six person team plus four additional individual members) hang glider pilots.

Entries and payments (or payment arrangements) must be made on the official on-line Entry Form. Entry deadline is 15. March 2010.

NAC registrations: 15 November 2009 – 15. March 2010

Each NAC is invited to register a team of up to:

- 6 class 5 pilots plus 2 individual class 5 pilots,
- 4 individual class 2 pilots
- 6 class 1 women pilots plus 4 individual class 1 women pilots.

Entry will be confirmed upon receipt of full payment by the date advertised on the competition website.

1.2 Entry Fees.

The standard entry fee is **450 euros** per pilot and **250 euros** per team leader and assistant (a competing pilot acting as team leader does not need to pay the team leader fee).
For late entry fee payment (after the entry deadline) a 10% surcharge may be applied.

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

- pilot competition information and souvenir packages
- unlimited transport for pilots and gliders (class 1 and 5 and team leaders) with Tegelberg cable car 07.05.- 21.05.2010
- carpark fees Tegelberg cable car
- maps
- paid staff (launch, office, goal, directors, safety)
- on-site medical person
- t-shirt
- opening refreshments and entertainment
- organised activities during competition
- FAI steward and Jury officials
- free wireless internet access
- winner trophies
- closing meal and entertainment.

This entry fee does not include microlight air towing for class 2 which will be an additional €20 per tow.

Applications, with fees paid, not received by the entry deadline may be refused. All information requested on the registration form must be supplied.

1.3 Payment.

Entry fees shall be paid by bank transfer to:

Sparkasse Miesbach Tegernsee
Deutscher Hängegleiter Verband e. V.
BLZ 711 525 70
Konto. 620 080 655,
SWIFT: BYLADEM1MIB
IBAN: DE15711525700620080655
Codeword: "WM2010 and name of pilot"

Germany, Austria and France are currently the three top ranked countries (Class 5 used because of largest entry numbers) and shall pay their fees directly to the FAI according to the provisions of Section 7A paragraph 7.1.3 and 7.3.

The FAI account details are:
Credit Suisse Private Banking
Rue du Lion d'Or 5-7
Lausanne
Swift code: CRES CHZZ 10A
Account name: Féderation Aéronautique Internationale
Account number: 0425-457968-32
IBAN: CH31 0483 5045 7968 3200 0

1.4 Championship Validity.

The title of World 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 championship scoring formula. **(2.4.6.1)**

2 GENERAL COMPETITION RULES

2.1 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 **(09. May 12:00)** is considered to be the official start of the championship. **(2.13)**

The following documents, information and equipment are required:

- Pilot's national rating qualifications
- Evidence of competitor's nationality (passport)
- Pilot's **valid** FAI Sporting License
- Receipt for payment of entry fees by the closing date
- Satisfactory evidence of glider airworthiness **(12.3.1).** Pilots must sign a glider certification statement or satisfy the requirements as outlined in **S7. 12.3.3** regarding flying prototypes (letter from manufacturer giving that pilot permission to fly the prototype).
- Certificate of Insurance
- At least one **3DGPS** is required (3D backup strongly recommended,) of each competitor for registration with make, model and serial number available.
- Pilot and driver mobile telephone numbers
- Pilot helmet certified to the EN966 standard for approval (Classes 1 & 5)
- Class 5 pilots to bring equipment (harness, instruments, helmet, clothes) for weighing with regard to ballast limits (S7 12.5.1)

Team leaders will be asked to nominate one name for each of the task and safety committees from their pilots for the first team leader briefing. **(2.6.3 and 2.6.4)** Separate task and safety committees will be

chosen for each Class. There may be a combined safety committee for Classes 2 and 5.

3 WIND SPEED

The maximum wind speed in which a task shall be flown is 30 km/h (including gust readings) for all classes. Wind speed shall be measured at the weather station on Tegelberg T/O or at the Füssen airfield, respectively.

Briefings may be delayed in order to assess weather conditions.

4 EQUIPMENT

4.1 RADIOS & MOBILE PHONES:

Team leaders are to contact the organization for information on permitted radio use during the competition.

Further information on the procedure for contacting pilots and team leaders in the event of a stopped task or other safety concern during tasks will be discussed at the first team leader briefing.

All pilots and teamleaders should have a mobile phone and must register their numbers to the organization during registration. An SMS broadcast system will be set up to send information on the competition to all pilots.

4.2 COMPETITION NUMBERS:

Competition numbers will be provided. They have to be on the underside of the right hand side of the pilot's wing (number points to leading edge). Pilots who have a glider with a black/very dark under surface may place the number on the **right leading edge** towards the wingtip. **(2.12)**

4.3 GPS:

3D GPS tracklog is the only means of flight verification permitted.

4.4 HELMETS:

All pilots in Classes 1 and 5 must wear helmets certified to EN966 when flying. Pilots without such a helmet will not be permitted to fly the task.

5 TAKE-OFF METHODS

5.1 Foot launch from hill sites (class 5 and 1 women)

Type of launching – will be ordered launch. Pilot launch order for the first task will be determined by the 01 May, 2010 WPRS ranking and thereafter will be based on the overall provisional results. The first 30% of the pilots in each class will launch in reverse order of the current overall provisional ranking in the competition. The remaining pilots launch in the ranking order.

Fixed places for rigging the gliders will be assigned to the pilots. Launch marshals will call the order of launching. Pilots must be completely ready to fly when the marshal calls her/him to move into the launch lane. Extra safety checks will be carried out by launch marshals. Pilots not ready will have to launch after all remaining pilots waiting to launch. 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.**

PUSH RULE: The take off "push" system will be used. **(2.24.6).** Only pilots in their harnesses, ready to take off are allowed to push.

Pilots will have 30 seconds to decide to launch or not, then 30 seconds of uninterrupted launchable conditions to launch. If the decision is to not launch, the pilot must queue behind all pilots in their class remaining to launch (names will be put on a list). The pusher has no decision time on launch and must launch within 30 seconds of uninterrupted launchable air **or score zero** for the day. In the instance of a pilot wishing to launch when nobody else is interested in starting (e.g during stable conditions) and to aid getting pilots off the launch site on slow days, the launch director may permit the pilot to enter the launch lane and start without the entire push process being conducted.

Separate launch window times will be specified for the different classes. In the event of Class 1 and Class 5 gliders being in the launch lane at the same time during a push, the push will apply only to the pilots in the same class as the pusher.

At the meet director's discretion, point penalties may be given to pilots not adhering to launch rules.

5.2 Microlight towing from airfield (class 2)

Type of launching – **open window**. This **may** revert to **ordered launching** during the competition if the meet director and launch staff feel open window launching is not working efficiently.

Pilot rigging order for the first task will be determined by the 01. May, 2010 WPRS ranking and thereafter will be based on the overall provisional results. When a pilot wishes to launch he/she steps sideways out of the rigging line into the launch lane, and moves forwards towards the towing point. A higher ranked pilot who wishes to launch at the same time may step in front of him/her if the first pilot has not already walked past.

A pilot stepping into the launch lane must be completely ready and intending to launch so that once the tow point is reached he/she will be towed as soon as there is an available tug and launchable conditions. This means that no "push" system is necessary.

The towing and release area will be specified in the task briefing. General release altitude will be 700 m AGL, but can be specified in the task briefing to suit the day conditions if necessary.

Additional information regarding the protocols for tow launching are at Annex B.

At the meet director's discretion, point penalties may be given to pilots not adhering to launch rules.

PUSH RULE: The take off "push" system will not be used.

In the task briefings the geographic boundaries for towing and the maximum altitude where the gliders should be released from the microlights will be specified. All microlights will be equipped with 3D-GPS monitoring the whole flight. These tracks will show the release points and altitudes to ensure that the towing operation is fair to all pilots.

5.3 Take-off sites and landing fields

Tegelberg – Schwangau (1700m ASL): Ramps for class 1 and 5, wind direction W to N/E. N47°33.595' E 010°46.77'

As space is limited at Tegelberg takeoff, there will be strict rules for rigging gliders. A rigging and waiting position will be assigned daily to every pilot according to the daily takeoff sequence. A pilot should rig in time at the given position. If a pilot does not show up for rigging in time, she/he may lose the takeoff position and may be queued to the end.

Tegelberg landing field (class 1 and 5): N 47°34.300' E 010°45.500'

Füssen Glider Airfield (787m ASL): Aerotow for class 2 by microlight aircraft, also official landing field, N 47°34.960' E 010°41.180'

Any competing gliders rigged in start lanes must be moved to the correct setup position before the pilot briefing.

5.4 National borders

The competition area is in the territory of Germany and Austria. There are no restrictions for crossing this national border by a glider.

5.5 Overcrowding in the air

In the event of dangerous overcrowding in the air around launch the competition director (or main launch or safety directors) may close the launch temporarily until congestion has eased.

5.6 Medical personnel, rescue

A doctor or a qualified paramedic will be present on Tegelberg launch at all times during the launch open window. Mountain rescue is on standby and will be available within a few minutes. If required a helicopter would be called in from Reutte/Austria (10 km flight distance from Tegelberg) or Murnau (30km). There are three additional rescue helicopter bases within 50 km flight distance.

5.7 General Daily Schedule

(All times subject to alteration)

8:00	Cable car opens for glider transport
8:30	Team Leader Briefing at HQ - review of previous day, weather information if any, daily schedule.
9:30	Official Staff leave for take-off
10:15	Task Advisory Committee & Safety Committee meeting on launch
11:15	Pilot task briefing on launch
12:00	Launch window open

Until 20:00 Transport of gliders to take-off for the next day's task (strongly recommended).

Report back time to be announced daily at task briefing.

6 WAYPOINTS

6.1 Start cylinders

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)**

6.2 Start Gate height limits

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 = Reduction 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)**
See appendix A at the end of the local regulations for extra information.

6.3 Turn direction

A daily **turn direction** will be used – left turns will be used on odd calendar days, and right turns on even calendar days.

6.4 Turn points

Turn Points will be cylinders of 400m radius unless otherwise specified at the task briefing **(1.6.8).** In the interests of safety, a turn direction at turn points may be specified at the daily task briefing.

6.5 Goals

Goals (not the end of speed section) will be a virtual cylinder of 200m radius centred on 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 co-ordinates as a flight reference only for pilots . There will be no recording of crossing the physical goal if a virtual goal cylinder is used (13.2.1).

End of speed section will be a virtual cylinder of 1000m radius centred on the goal, unless otherwise specified at the task briefing. Time is taken from GPS recordings only.

Gliders reaching goal must land in the official landing field as specified at the first task briefing. The Goal Marshal will witness that glider configuration is not changed between when a pilot lands and when any sprog measurements of the glider according to chapter 13 are made.

7 LAUNCHING AND REFLIGHTS

7.1 Number of start attempts

Competitors will normally be allowed only one take-off attempt for every task within the stated take-off period unless he/she lands at the official landing area of Tegelberg – in which case two take-offs will be permitted, but only if the pilot has not already taken a start gate. He/she has to use his/her own transport back to the launch, but only after having been registered by landing marshals.

7.2 Start permission

Pilots may not enter the start lanes unless they are fully ready to fly. At no stage is a pilot permitted to launch without having been given permission by the launch director who is present at her/his lane. Marshals will be in the start lanes to carry out checks, which all pilots must allow them to do.

7.3 Sign in and out

In the interests of safety all pilots who intend to fly for the day must sign a SIGN IN sheet before launching (this will be up at launch) and also SIGN OUT again at HQ after the task, even if the task has been stopped. Penalty points may be applied for failure to follow this rule.

8 TASK PERIOD

8.1 Timings

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 policy will also be displayed in writing and an extension may be used (for example) when the launch marshal/meet director deems conditions have considerably slowed launching or when launch has been closed due to an accident.

8.2 Launch Validity

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).

9 SCORING AND FLIGHT VERIFICATION

9.1 Scoring Software

Scoring will be done with the FS scoring programme using the GAP 2008 scoring formula (2.29.2).

GAP parameters: Will be announced by the meet director at the first team leader briefing.

Pilots who complete the speed section but do not reach goal will receive only 80% of their speed points.

GPS set up: WGS 84, hddd,mm.mmm' (degrees, minutes, decimal minutes) offset: + 02:00 (hours)

9.2 Flight Verification

Flight verification will be carried out using the latest release of fs software, www.fs.fai.org.
Track download will be done with GpsDump. The following cables will be provided by the scorer:

Garmin round, Garmin eTrex-style, Garmin Foretrex-style, Garmin USB
Bräuninger Compeo and Competino and Flytec 5020 and 5030
Aircotec XC-Trainer and Topnavigator
MLR
Mini-USB for Instruments with internal USB-serial adapter

9.3 Track Logs

GPS track log evidence is the only way to verify and provide data for flights and where cloud flying or airspace infringement is considered possible the tracklog must be from a 3D GPS. The track logs of two or more GPS's together may be used to provide a required track log. (15.2.2)
To be considered valid, the GPS track log has to comply with the current requirements in Section 7A of the FAI Sporting Code, Chapter 15.

9.4 Team Scoring

For Classes 1 and 5 team scoring will be in accordance with S.7A (5.7.2) i.e the sum of the highest scoring 3 pilots in each team will be added daily to arrive at the team score. For the Women's Worlds the sum of the 2 highest scoring pilots in each team will be added daily to arrive at the team score.

9.5 Stopped Tasks

Scoring a **stopped task** is according to Section 7 A, (5.5.8), except that the score back time will not apply to any Class which already has all pilots in that Class landed before the task was officially stopped. It may also be the case that a task is stopped for only one or two of the 3 Classes. The qualifying time used to score a stopped task is the actual time which the first pilot took, not the first start gate time. The minimum time that must have elapsed after the first valid start is taken for a task to be scored is one hour for Class 1 (Women) and 1.5 hours in other classes.

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.

9.6 Early Starts

Early start (15.5.7.3) Where a track log shows that the pilot started before the first permitted start time he/she shall be given a time penalty equal to 10 times the amount of time between his/her actual start time and the first permitted start time; this time penalty shall be added to his/her total task time. The maximum amount of early start for this rule to be applied is 5 minutes; any pilot starting earlier than 5 minutes before the first permitted start time shall be scored to minimum distance only.

9.7 Landing Forms

Pilots must fill in landing and safety forms after each flight. Pilots must also report back after stopped tasks.

9.8 Assisting a Pilot in Distress

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/she 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/her 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)

9.9 Permitted GPS Models

Pilots may use any model of GPS unit that is compatible with the flight verification software to be used at this event. For the models of GPS instrument supported see 9.2 above. Pilots with other models must be prepared to provide hardware, software and methodology for downloading.

10 PENALTIES (5.9)

10.1 Cloud flying

Cloud flying by competitors is illegal and un-sportsmanlike. Competitors who deliberately 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 witnesses from 2 different countries near the accused 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 and the witnesses show the accused above the witnesses at the time of the incident.

If the accused cannot produce a barograph trace for that day or a 3D GPS track log from their 3D GPS, 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.

The penalty for verified infractions will be a zero score for the day of the first offence and exclusion from the remainder of the competition for any subsequent offence. (2.17.10)

10.2 Restricted airspace

Pilots are expected to familiarise themselves with all restricted airspaces in the vicinity of course lines from the maps supplied. The onus is on the pilot at all times to prove that he/she has not infringed airspace. The general altitude limit for gliders in the competition flying area is FL 130 in Germany and FL 125 in Austria. There are no lower restricted airspaces in the task area.

10.3 Competition Altitude Limits

These 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/her instruments record and/or display barometric or GPS altitude, or both, and what corrections are made automatically. He/she must ensure the instruments are set correctly before flying. 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 6.2 above, for when start gate height limits are set and the penalties applying to infringement of those altitude limits)

See Appendix 1 on Altitude Verification for further information

10.4 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

10.5 Abusive behaviour

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

10.6 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 lose 10% of their day score for a first infringement, 50% for a 2nd infringement and will score zero for any further infringements (unless a reasonable explanation is offered as soon as possible to the meet director). Penalty points may also be given for late GPS downloads.

11 REST DAYS

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 **(2.21)**
After the fourth consecutive day of flying there will be an announcement on the evening of that fourth day and published at HQ about whether the following day will be a rest day.

12 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 Comp Director, preferably by the team leader to request a correction.
The time limit for complaints is **12 hours** after publishing of the **provisional results.**
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 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 results 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)**

13 SPROG MEASURING (Class 1)

1. The sprogs of all competing pilots' gliders will be measured before the end of registration. This measurement will take place inside the Tegelbergbahn buildings. Measurements taken during the competition will usually take place at the official landing field but may be taken on launch in special situations. Selected gliders will be measured multiple times in order to gather data as to the repeatability of measurements.
2. All measurements will be published with the pilots' name and glider particulars as well as the certified setting. Measurements will be made of sprog systems, but may also include other dimensional measurements.
3. All gliders must have their sprogs set to the certified settings of a recognized testing body (DHV, HGMA or BHPA) or to a manufacturer's declared safe setting. Any glider with sprog settings which exceed either the certified settings by + or – 2 degrees or the manufacturer's declared safe settings by 0.5 degree will be reported to the Safety Director.
4. A glider with a tail will have to have the certified tail dimensions and angle setting published. It is the responsibility of the pilot to supply these values to the CIVL officials.
5. Prototypes will be allowed in the competition as long as the pilot supplies a letter of approval from the manufacturer and documentation from the manufacturer that the glider has passed a pitch test. The settings of the pitch devices (sprogs, tail, etc.) must be provided and measurements will be taken according to these numbers. The tolerances specified in paragraph 3 will also apply to these measurements.
6. Gliders will also be measured randomly during the competition. All subsequent measurements will be published. If a pilot is found to have flown with non-compliant settings when measured after a task, the Meet Director and Steward will be notified. The penalty for deliberate non-compliance will be 5% of the maximum available score for that task. In addition, the glider will be measured again the next day. If the sprogs are again found to be non-compliant, the pilot will not be allowed to fly the task (i.e. will receive no score).
7. Measurements will be performed by leveling the glider in longitudinal and horizontal axes with full stock VG setting applied. Angle measurements of the individual sprogs with respect to the keel will be taken to be

the sprog settings
8. All pilots must attend a safety discussion relating to pitch stability to be held as part of the Mandatory Safety Briefing, before flying in the championship.
9. Section 7 provides the facility to adjust these rules during this competition if clear safety issues arise.

14 REFERENCES

References to Section 7A rules given in this document are to the 2009 edition.

Appendix 1

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 - QNH * 27ft/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.

Appendix 2

Aero-tow Equipment and Procedures

Aerotowing Class 2 (Swift-Class)

1. **Towing equipment** (all aircrafts and tow equipment must be approved by national rules)

1.1 Micro light tugs

1 Dragonfly and several Trikes

1.2 Tow ropes (DHV-Standard, will be provided)

Length: 60 Meter, breaking load >200 daN, weak links: 100 and 120 daN

1.3 Releases for hang gliders

Approved releases (> 150 daN test load).

If special rings are requested, they must be delivered.

2. **Pilot standards**

2.1 Pilots must be experienced in aero towing.

2.2 National Pilot license + aero towing instruction required.

3. **Towing Rules**

3.1 Take Off-Procedure

- Dolly or landing gear starts are permitted
- Launch assistance will be provided

3.2 Signals

-No signals by hang glider pilot when releases tow rope

-Arm waving signal by micro light pilot (one arm several times up and down) means:

Hang glider pilot must release tow rope immediately!

3.3 After release the tow rope

-Hang glider pilot always turns to the right

-Micro light Pilot always turns to the left and decent for landing

3.4 Aerodrome traffic circuit

-will be located (pilots briefing)