

LOCAL REGULATIONS FOR
TEGELBERG FAI WORLD HANG GLIDING CHAMPIONSHIPS 2010
(not yet approved by CIVL Plenary)



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. **(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. PROGRAM (check on website regularly for any alterations to times printed below):

Registration at HQ (IKARUS-Tegelberg) – **GPS coords: 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

Sprog measurements Class 1 gliders only) at Tegelbergbahn – GPS coords: 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).

Mandatory pilot safety briefing 10. May 9:00 at Kurhaus Tegelberg
(A pilot who has not attended this briefing may 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	Dr. Dietrich Münchmeyer
Safety Director	Christof Kratzner
Safety Director Airfield	Horst Barthelmes
Competition Physician	Dr. Patrik Krös, to be confirmed
Deputy Competition Director	Theo Klafsky
Event Director	Benno Osowski
Competition Office Manager	Petra Aichele
Main Launch Director	Martin Becker
Airfield Launch Director	Theo Klafsky
Goal marshal	Klaus Speckenheuer
Scoring	Andreas Rieck
Transport Manager	Franz Bucher, Tegelbergbahn
PR Manager	Rebekka Speckenheuer
Meteorologist	Volker Schwanitz
Air Marshals (if any)	TBA
FAI Steward:	TBA
FAI Jury President:	TBA
Members:	TBA
Sprog measurement	Hannes Weininger, Christof Kratzner

References to Sec. 7A have to be checked

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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 eight Class 1 (women) (one six person team plus two 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. February 2010.

NAC registrations: 15 November 2009 – 15 February 2010

Each NAC will be 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 2 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). See further options below. For late entry fee payment (after the entry deadline) a **25%** 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 teamleaders) 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
- free wireless internet access
- winner trophies
- closing meal and entertainment.

This entry fee does not include microlight air towing for class 2.

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"

Except country A, country B and country C 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: Fédération 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 GAP 2008 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 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 **(2.10.2.1)**. Pilots must sign a glider certification statement or satisfy the requirements as outlined in **S7. 2.10.2.3** regarding flying prototypes (letter from manufacturer giving that pilot permission to fly the prototype).
- Certificate of Insurance
- At least one **3DGPS** is required (backup strongly recommended, 3D) of each competitor for registration with make, model and serial number available.
- Pilot and driver mobile telephone numbers

Team leaders will be asked to nominate 1 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)**

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 to monitor if initial strong winds decrease through the day. (2.17.11)

4 EQUIPMENT

4.1 RADIOS & MOBILE PHONES:

Radio frequencies not yet clear. Legal without licenses are LPD-radios (Low power devices, 69 frequencies 433.075 bis 434.775 MHz, 10 mW) and PMR-devices (Private mobile radios, 8 frequencies 446,00625 - 446,09375, 500 mW ERP). Airband radios or amateur radios require licenses. An allocation of special frequencies in the 2m-band without licenses is under discussion with German Authorities.

All pilots and teamleaders should have a mobile phone and should register their numbers to the organization. An SMS broadcast system will be set up to send information on the competition to all pilots. If possible, pilots should be able to read SMS text in flight for security reasons. In flight SMS is not a primary channel of information but has proved at least as a valuable backup.

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

GPS tracklog is the only means of flight verification permitted. Only 3D GPS units will be permitted for flight verification where cloud flying or airspace infringement is considered possible.

5 TAKE-OFF METHODS

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

Type of launching – **There is only ordered launching** during the competition. The first 30% of the pilots in each class will launch in reverse order of the current ranking in the competition. The following pilots launch in the ranking order. As long as there is no competition ranking, this ranking is replaced by the CIVL ranking of 01. May, 2010.

Fixed places for rigging the gliders will be assigned to the pilots. Pilots in launch lanes must be completely ready and intending to launch. Pilots who are ready and who wish to move into a launch lane must give their pilot number to their lane official who will be recording the launch order for fairness.

Pilots will have 30 seconds to decide to launch or not, then 30 seconds of launchable conditions to launch. If his decision is to not launch, a pilot must queue behind all pilots remaining to launch (names will be put on a list).

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

PUSH RULE: No take off "push" system will be used. (2.24.6).

5.2 Microlight towing from airfield (class 2)

Type of launching – **open window** (free take-off without any set launch order). This **may** revert to **ordered launching** during the competition if the meet director and launch staff feel open window launching is not working efficiently. In this case, the procedure is as describe in to 5.1.

Pilots in launch lanes must be completely ready and intending to launch. Pilots who are ready and who wish to move into a launch lane must give their pilot number to their lane official who will be recording the launch order for fairness.

In the event of a “**push**,” the pushing pilot’s number will be recorded and once he/she is in the launch lane no other pilots may enter the launch lane ahead of the pusher. **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 be used. **(2.24.6)**. Only pilots in their harnesses and ready to take off are allowed to push. Pilots will have 30 seconds to decide to launch or not, then 30 seconds of favourable wind to launch. If the decision is to not launch, a pilot must queue behind all pilots 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 favourable wind) **or score zero** for the day.

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. N 47°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, he may loose his 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 micro light aircarfts, also official landing field, N 47°34.960’ E 010°41.180’

Any competing gliders rigged in start lanes must be moved out 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 personal, rescue

A doctor or a qualified paramedic will be present on Tegelberg lauch 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 leaves 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 takeoff 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 (1.6.7.10)

6.2 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.

6.3 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.

6.4 Goals

Goals (not the end of speed section) will be a virtual cylinder of 100 m 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 for pilots only. There will be no recording of crossing the physical goal (13.2.1).

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

Gliders reaching goal have to land in the official landing field. The Goal Marshal will witness, that glider configuration is not changed between landing and a measurements according to chapter 13.

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 done the start gate. He/she has to use his/her own transport back to the launch, but only after they have 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 his/her 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, also if the task has been stopped. Penalty points may be applied for failure to follow this rule.

8 TASK PERIOD

8.1

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 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

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 will be done with the latest version of the Race scoring programme using the GAP 2002 scoring formula (2.29.2).

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

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

9.2

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

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. (16.2.2)
To be considered valid, the GPS track log has to comply with the current requirements in Section 7A of the FAI Sporting Code, Chapter 16.

9.4

Team scoring will be in accordance with S.7A (13.3) i.e in Class 5 with a team size of 6, the sum of the highest scoring 3 pilots in each team will be added daily to arrive at the team score.

9.5

Scoring a stopped task is according to Section 7 A, (5.5.8). The qualifying time starts, when the first pilot actually took the start.

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

Any pilot who flies on course before the start gate opens (whether or not they reach goal) will have his or her track log shifted back by ten times the amount by which the pilot started before the official start time, providing this is not longer than 5 minutes. If the early start exceeds 5 minutes the pilot will only be scored to minimum distance. By doing this, a pilot will be penalized twice, one in consideration of his goal arrival time and one considering that his LC (leading coefficient) will be devaluated too. The pilot that does not arrive in goal will be penalized only due to his LC.

9.7

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

9.8

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. (2.28.5)

9.9

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 at <http://www.CompeGPS.com>
Pilots with other models may be required to provide hardware, software and methodology for downloading.

10 PENALTIES (5.2)

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.

10.2 Restricted airspace

Pilots are expected to familiarise themselves with all restricted airspaces in the vicinity of course lines from the maps supplied. Penalties for infraction of airspace - refer to S7 2.27.2. The onus is on the pilot at all times to prove that he/she has not infringed an 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 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 (**5.2.1 & 5.2.2**)

10.4 Abusive behavior

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**).

10.5 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 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 there 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 (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 14).

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 normally take place in the landing areas, 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.