

# ***DHV - Online Contest***

## ***Competition Regulations 2005***

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# ***DHV - Online Contest***

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## 1. Introduction

### 1.1. Summary

The **Online Contest** is an international cross-country flying competition.

Flights may only be documented using GPS Logging instruments, and must be uploaded to the **Online Contest Server** thereafter.

Uploaded flight tracklogs will be entered under the following categories:

- Ø **National Online Contest**
- Ø **Continental Online Contest** (e.g. European Contest)
- Ø **World Online Contest**

Actual rankings and results are available for viewing on the **Online Contest Server**, enabling a dynamic and transparent publication of all entered flights.

### 1.2 Introduction

The following regulations are valid for both the international and national **Online Contests**. Differences for the national **Online Contest** are listed under point 10.

The references „pilots and competitors“ are understood to include both male and female participants.

### 1.3. Purpose

The **Online Contest** is for the promotion of hang- and paragliding cross-country flying.

## 2. Coordinators

### 2.3. National evaluators

Each participating nation must nominate a „*national evaluator*“. For nations with only a few (10 and less) participants, flight tracklog evaluation and pilot support will be provisionally conducted by the OLC team.

„*National evaluators*“ are listed under <http://www.onlinecontest.org/holc> on the internet.

The „*National evaluator*“ is responsible for checking the validity of all flights entered in the national competition, and should provide technical support for pilots requesting help.

## 3. Entry requirements

### 3.1. Competitors

Pilots wishing to compete in the **Online Contest** must be members of their respective national hang- or paragliding association, and must either be citizens of, or residing permanently in the respective country.

A current pilots license and all necessary insurance documentation to satisfy the legal requirements for cross country flying must be held.

### 3.2. Equipment

Every competitor must ensure that his or her equipment satisfies current airworthiness requirements. Every competitor must possess the necessary airworthiness documentation to satisfy legal requirements.

Every competitor is responsible for entering the **Online Contest** under the correct glider class.

A change of glider, and competition entry under more than one glider class during the season are both permitted.

## 4. General competition rules

#### 4.1. Competition duration

International and national **"Online Contests"** run synchronously worldwide. The season is defined as approximately 11 months.

*Competition end*

yearly on September 15th

*Competition begin*

analogue to the sailplane competitions the OLC begins on the Wednesday following the second weekend in October

#### 4.2. Entry

Competitors who have satisfied the entry requirements for the **National Online Contest** will be automatically entered in all **International Online Contests**.

All pilots of nations running national **Online Contests** are eligible for entry.

#### 4.3. Entry fees

An entry fee of € 6.- per pilot per season is applicable. The total fee for all entrees from a participating nation must be paid to the DHV by the respective national evaluator. The number of entrees from a particular nation will be evaluated at the end of the season.

The entry fee will be used for administration and server expenses, and for prizes.

#### 4.4. Limitations

**National Online Contest:** At least one flight must start from within the countries political borders. Additional flights must start from within the countries continent. Exceptions to these rules may be defined within special national regulations.

**European Online Contest:** geographical borders + Canary Isles + Turkey

**Australian/Oceanian Online Contest:** Australia, Oceania (New Zealand etc.)

**North American Online Contest:** USA, Canada

**South American Online Contest:** Caribbean, South America

**World Online Contest:** All flights will automatically be entered in the **World Online Contest**.

#### 4.5. Launch methods

Foot-launch, winch-launch, and ultralight-towing (hanggliders only; max. release alt. 2500 ft AGL) are permitted.

#### 4.6. Legal compliance

All flights must be conducted in accordance with all applicable national and/or international laws.

The pilot is solely responsible for ensuring this compliance.

Should a pilot be warned or penalised by air traffic control, the organisers reserve the right to cancel and remove such flights from the scoring.

#### 4.7. Cross-Country flights within other competitions

Should a pilot wish to enter flights from a separate competition event in the **Online Contest** scoring, then the pilot alone is responsible for uploading these tracklogs to the **Online Contest Server**.

#### 4.8. IGC tracklog files

Every pilot must keep a personal backup of all his / her tracklog files uploaded to the **Online Contest Server** until 1 calendar month after the competition end.

Once a pilot has uploaded an IGC tracklog file to the **Online Contest Server** it becomes the property of the organisers who may do with it as they see fit.

## 5. Championship classes

### 5.1. Classification

The following scoring classes as defined by the FAI exist in all National and International **Online Contests**:

- Ø Flexible hanggliders (FAI-class 1)
- Ø Paragliders (FAI-class 3)
- Ø Rigid wing hanggliders (FAI-class 5)

Each scoring class has a mens- and ladies-champion providing there are at least 10 entrants in the class.

The pilot with the most points in each scoring class, is the **“Online Contest Champion”** for this class.

## 5.2. Club teams

A club registered with the national hang- or paragliding association, will be entered with a minimum of 2, maximum of 4 of its best pilots in the club team ranking. Only one team per club is allowed.

Flexible- (FAI-1) and rigid-wing (FAI-5) hangglider pilots will be entered together in club teams, whereby the rigid-wing hangglider points will be multiplied by a handicap factor of 0.85.

Pilots of all paragliders (FAI-3) will be entered together in club teams with no handicap factors to be applied to their points regardless of paraglider model.

### Change of club membership:

- Ø Membership of a particular club must be declared at registration.
- Ø It is only permitted to change club membership before the first flight is uploaded.
- Ø It is not permitted to change club membership during the season.
- Ø A pilot may be entered for only one club in the scoring.
- Ø For the inclusion of a new club in the scoring, an application must be made to the National Evaluator.

## 5.3. National teams

The 5 best pilots of a nation per scoring class will be entered together as the national team.

## 5.4. Professional Teams

Manufacturers or other pilot collectives may enter Professional Teams (separate for paragliders and hanggliders) for scoring within the Online Contest.

### Team registration:

- Ø Registration under: <http://www.onlinecontest.org/holc>
- Ø Registration deadline: 31st March 2005 (complete teams only)
- Ø Registration fee: A-Team € 120.-, B-Team € 100.- und C-Team € 80.-
- Ø Bank Account *OLC-DHV Online Contest*:  
 Bank Identifier Code (BIC): GENODEF1ASU  
 International Account No. (IBAN): DE75 7116 2804 0003 2337 07  
 German Bank Account No.: 3233707 Sort code: 711 628 04
- Ø Teams may consist of international members.
- Ø The team name must be provided by either the team leader or the manufacturer at registration.

### Team details:

- Ø Manufacturers may enter a maximum of 3 teams (A-Team, B-Team, C-Team)
- Ø Teams may also be entered by independent groups of pilots.
- Ø Every team must register its team name (e.g., “Manufacturer Team-A”, “Flying Witches” etc.)
- Ø Every team must include a minimum of 3 and a maximum of 4 pilots registered with the **Online Contest**.
- Ø One of the pilots must be named as the “Team Leader”, who is responsible for all correspondence with the organisers.
- Ø A pilot may only be entered in one team.

- Ø A change of team, or change of glider manufacturer during the season is not permitted.

#### Scoring details:

- Ø Competition begin / end : analogue to the general OLC season.
- Ø Total cross country points (as defined under the OLC-scoring) for the best 6 flights (worldwide) per pilot will be entered in the scoring.
- Ø Only the 3 best pilots per team will be scored.
- Ø Rigid-wing (FAI-5) hangglider cross country points will be multiplied with a handicap factor of 0.85.
- Ø These scoring regulations are valid worldwide.

#### Prizes and Prize giving:

- Ø 80% of the registration fees collected will be used as prize money as follows:  
1st Place 40%, 2nd Place 25%, 3rd Place 15%, 4th Place 10% and 5th + 6th Place 5% each.
- Ø A ceremony will be held to honour the winners and distribute prize monies.

### 5.5. OLC League

The OLC League is an additional Club ranking, which is based upon the average speed flown by pilots on particular days during the season.

The regulations for the **OLC-League** may be downloaded from or viewed under the following link: <http://www2.onlinecontest.org/holc/2005/bundesligainfo.php>

Additional flight uploads are not necessary – all flights entered under the standard OLC scoring will automatically be entered in the **OLC-League** scoring.

### 5.6. OLC - Records

Record flights flown over the year and overall record flights according to the OLC regulations can be viewed under:

<http://www.onlinecontest.org/holc>

## 6. Scoring and documenting flights

### 6.1. Documenting

The **Online Contest** competition allows pilots to fly cross country without having to declare a task before take off. Documenting a flight may only be done through the use of an appropriate instrument:

- Ø Standalone GPS
- Ø GPS with variometer and barograph
- Ø GPS integrated flying instruments
- Ø Logger

For flights exceeding a nominal distance of 75km, an altitude record (either GPS or barometric) must be supplied.

Further information on compulsory features necessary for instruments and software are to be found in the appendix "Technical details".

### 6.2. Scoring distance

After landing, the recorded tracklog should be examined to determine the scoring distance flown. Here the *start point*, up to 3 *turn points* and the *finish point* are to be positioned on the tracklog to provide the greatest possible distance.

A flight may be scored as a triangle, when the distance between start point and finish point is less than 20% of the entire distance as given by the 3 turn points. The scoring distance will then be given by the turn point distance, minus the gap (finish to start) distance.

### 6.3. Scoring

The distance in kilometres from start to finish over max. 3 turn points will always be scored with a factor of 1.5.

Triangular routes which conform to the FAI definition (the shortest leg of the triangle must be at least 28% of the total triangle) will be scored with factor 2 per kilometre.

All other triangular routes will be scored with factor 1.75 per kilometre.

The scoring rule which gives the most points will always be used. All scoring results will be rounded to 2 decimal places.

Flights under the minimum distance of 15 km will only appear in the daily scoring.

#### 6.4. Evaluating the flight tracklog

After landing, the recorded tracklog (.igc file) should be transferred to a computer with an appropriate flight evaluation software. This software should optimise the start, finish and turn point positions to provide the maximum number of scoring points for the pilot (saved in an .olc file). Once this has occurred, both the .olc and .igc files should be uploaded to the internet **Online Contest Server** to be entered in the scoring.

#### 6.5. Registering a flight over the internet

Every flight to be included in the scoring must be uploaded to the **Online Contest Server** using the appropriate registration form. The deadline for uploading a flight is always 24:00 (UTC) on the Tuesday following a week after the flight.

The server may be reached by following the links on <http://www.dhv.de>

Flights which are registered after the deadline, or which have been manipulated to contain false claims will be removed from the scoring by the National Evaluator.

After the deadline, a registered flight cannot be removed from the scoring.

Flights cannot be scored in the hang- and paragliding OLC should they be uploaded to the wrong OLC database (e.g. Sailplane-OLC).

Technical problems experienced when uploading must be reported to the National Evaluator per email with the deadline.

#### 6.6. Number of flights which count for the final score

A pilot may register as many flights as he or she may wish; the following number of flights will be taken for the final score:

- |   |                                   |  |
|---|-----------------------------------|--|
| Ø | <b>National Online Contest</b>    | the best 3 flights (at least one of which must be a national flight)             |
| Ø | <b>Continental Online Contest</b> | the best 6 flights (within the geographical borders of the respective continent) |
| Ø | <b>World Online Contest</b>       | the best 6 flights (worldwide)   |

## 7. Results, prizegiving ceremony and prizes

#### 7.1. Provisional results

Provisional results will be constantly updated and may be viewed on <http://www.onlinecontest.org/holc>

#### 7.2. Final results

Final results are valid once all flights have been checked by the National Evaluators and the protest deadline has been reached.

Final results may also be viewed under <http://www.onlinecontest.org/holc>

#### 7.3. Prizegiving ceremony

**National Online Contest** prizegiving ceremonies are to be organised by the respective national associations.

The **World** and **European Online Contest** prizegiving ceremonies are planned to be a joint event organised by the member nations.

Continental Online Contest prizegiving ceremonies are to be organised by the respective nations with the most entries.

#### 7.4. Prizes

Trophies will be presented to the winners of the World Online Contest, and Continental Online Contests to the pilots in each FAI Class who attain first place by the organisers.

Should there be more than 80 entrees in a particular FAI Class, then the top 3 pilots will be presented trophies.

The minimum number of entrees for an FAI Class is set at 10, in order that the winner of this class receive a trophy.

Winners of National Online Contests will be presented with trophies at the discretion of the participating nations.

- Ø Flexible hanggliders (FAI-class 1)
- Ø Rigid-wing hanggliders (FAI-class 5)
- Ø Paragliders (FAI-class 3)

## 8. Protests

### 8.1. Protests against other competitors

Should a national evaluator or the organisational committee not accept a complaint regarding flight scoring or the scoring advantage of another competitor, the pilot in question may protest this decision.

The protest must be sent to the national evaluator, and must arrive no later than one month after the flight took place, or one week after the end of season.

The national evaluator should then decide if the protest is valid. The final decision on the protest may be taken by a protest jury (see below).

Protests due to infringement of controlled airspace will not be handled by the organisers. National air traffic control authorities are solely responsible for airspace observation and enforcement.

### 8.2. Protests due to non-acceptance of a flight

Should a flight not be accepted by the national evaluator, then every pilot has the right to firstly register a complaint, and thereafter to enter a written protest against the decision.

A protest must arrive no later than one week after the end of season.

The jury is responsible for deciding if a protest is valid or not.

### 8.3. Jury

The jury is formed from 3 national evaluators and makes the final decisions with regard to protests. No further appeals or legal actions are permitted.

## 9. Liability and disqualification

### 9.1. Liability

The organisers accept no liability for damages to competitors or third parties.

### 9.2. Disqualification

Competitors who wilfully make false flight claims or fail to comply with these regulations in order to benefit themselves in the scoring, or who give good cause for belief that this is so, can be disqualified from the competition.

## 10. National differences to general Online Contest rules

National differences to the general Online Contest rules and regulations are decided upon by the respective national coordinators of the competition, and may be viewed under the following link: <http://www.onlinecontest.org/holc>



## Appendix to the competition regulations

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## 1. FAI "Technical Specification for IGC - Approved GNSS Flight Recorders"

This document provides the basis for all instrumentation and software considerations used in the Online Contest. It contains a set of highly recommended guidelines but the use of it is not compulsory.

The IGC-GNSS web page may be viewed here: <http://www.fai.org/gliding/gnss>

and the above named document here: [http://www.fai.org/gliding/gnss/tech\\_spec\\_gnss.asp](http://www.fai.org/gliding/gnss/tech_spec_gnss.asp)

## 2. Software specifications, for developers

### 2.1. General software goals

The following goals are recommended for software programs to be used for the evaluation and optimisation of tracklog data:

- Ø Direct data transfer from as many different GPS instruments as possible
- Ø Direct data transfer from as many different barogram instruments as possible
- Ø Inclusion of altitude data from barogram instruments in the B-record of an IGC file
- Ø Evaluation of best possible start, finish and turn points, and task / distance optimisation as according to the OLC regulations.
- Ø Particular care should be taken not to overwrite a valid security record present in an IGC file.
- Ø Optimised tasks / routes and their respective scores should be visible together with the flight tracklog data.
- Ø The pilot should be able per time and date input, to define which parts of a tracklog should be displayed and optimised. This should help to eliminate instrument initialisation errors, and portions of the tracklog which were recorded while being towed from a winch or an ultralight.

### 2.2. IGC File format

The IGC File format is described below for the software development and standardisation purposes.

An IGC File must contain the following records:

#### **A-Record**

Syntax: AXnn description

'Xnn' is used for a 3 letter manufacturer code: the current code list may be viewed under <http://www.onlinecontest.org/holc> under "Software"

The '**description**' is used for the model name and BIOS version of the instrument and followed by the instruments serial number, and is often read directly from the instrument.

#### **H-Record**

Evaluation software must be able to verify the pilots name, the flight date, the type of aircraft and the GPS datum used from the **H-Record** in the IGC File. Should altitude data be obtained from a barogram, then this must be noted in the **H-Record**. All other H-Records are optional for the Online Contest.

**B-Record**

This is the main IGC record in which position, GPS altitude, barometric altitude, UTC and GPS status are recorded.

**L-Record**

Following all the **B-Records**, an **L-Record** must be present in the IGC File indicating the evaluation software used, and appropriate release number, when the instrument used is not an **FAI-GNSS approved Logger**.

Example 1:

```
LXGD GpsDump version 3.35,download 28-12-2004 22:35:11
```

Example 2:

```
AXMP Garmin_GPStap_60C
HPDTE270705
HPPLTPILOT: Hans Mustermann
HPGTYGLIDERTYPE: Advance Sigma 6
HFDTM100GPSDATUM: WGS-1984
HFPRSPRESSALTSSENSOR: Braeuniger IQ Competition 1209
LXMP    MaxPunkte_4.4
LXMP    Friday 07.01.2005 22:32:40
```

**G-Record**

The **G-Record** serves as a digital signature for the IGC File and may only be written when original tracklog information is transferred from the GPS or barogram instrument. Later viewing of the tracklog information should not modify the **G-Record**.

The evaluation software should allow for the deletion of erroneous GPS / barogram information, but not for the modification or addition of further B-Records without invalidating the security **G-Record**.

The **G-Record** should be encrypted (either as per FAI guidelines or according to personal preferences).

A verification program **vali-xxx.exe** (which runs under MS-DOS, Linux or 32-bit Windows) for checking the validity of the **G-Record** should accompany the tracklog transfer software.

Error codes and programming specifications are regulated by the FAI:

All command-line executables should return results in clear text to stdout on a single console, opening no further windows or consoles during the validation process.

It is recommended that a simple "pass" or "fail" display the test results on the console.

The IGC Filename should be entered as a start parameter for the verification program.

Programming variations requiring interpreters (Visual Basic etc.) are not permitted and may prevent the official recognition of the software.

Encryption must use an RSA algorithm of 196bit length.

All other IGC record entries (C, I, F, J, K, D-Records etc.) are classed as optional for the **Online Contest**.

**2.3. Security records**

As from the 2003 season **G-Records** are a required prerequisite for all IGC files to be included in the **Online Contest** scoring. The **Online Contest Server** automatically checks and validates uploaded tracklogs via this security record to prevent manipulation.

Tracklogs without security records or with invalid security records will be rejected.

**2.4. Approved Software**

To ensure software implements the **G-Record** correctly and to ensure the presence of a functioning **vali-xxx.exe** on the **Online Contest Server**, all software must undergo approval testing under the technical guidelines listed above.

Software entered for approval testing must be sent complete with a full license, the corresponding **vali-xxx.exe** program and a *digitally signed IGC file produced by the software*, to the DHV. Should the software only function together with specific hardware, then this too must be sent to the DHV. Results of the approval testing will be published on the DHV website.

Should updates to software require a new **vali-xxx.exe** program for verification, then renewed testing must be performed before the software can be listed as approved.

### 3. GPS hardware and GNSS logger specifications for pilots

#### 3.1. General

Every pilot is responsible for choosing his or her own recording instrument, logger or GPS. The pilot is responsible for recording a continual tracklog, correct transferral, evaluation and uploading as an IGC File.

Recorded tracklogs may only originate from a single instrument; tracks compiled from recordings from more than one instrument will not be accepted.

Should a logger split a continual flight into more than one tracklog, then the pilot should contact the manufacturer to rectify this problem.

Manufacturers which certify their instruments as **GNSS approved loggers** (FR, flight recorder) comply with the FAI regulations.

#### 3.2. GPS hardware recommendations

The DHV makes no special recommendations regarding GPS hardware. Flight documentation performed via **GPS** is fully equivalent to that performed with a **GNSS-logger**.

The compatibility of a particular piece of GPS hardware is largely dependant on the supporting software available for it.

#### 3.3. Recording interval

A continuously recorded tracklog must have at least one position recording per minute – i.e. the maximum recording interval is **60 seconds**.

It is recommended that the tracklog recording interval be set between 5 and 15 seconds to reduce the chance of a 60 second interval with no position recordings occurring.

Should a pilot intentionally switch off the GPS during a flight, this invalidates the tracklog.

#### 3.4. GPS failure

GPS failures may result in one or more breaks in the tracklog longer than 60 seconds. A separate altitude record (e.g. from a barograph) within the IGC file is generally required to verify the flight should this occur.

One or two separate GPS failures less than **15 minutes** long within a tracklog can be accepted by the national evaluator.

GPS failures of longer than 15 minutes will prevent the tracklog from uploading successfully to the Online Contest Server. Such flights are generally not scoreable.

Should an FAI logger produce more than one digitally signed tracklog for a single flight due to GPS failures, then all these tracklogs should be sent per email to the international evaluator and technical coordinator within the registration deadline. Acceptance of the flight will be decided upon separately. Grounds for refusal of a flight, do not have to be explained.

#### 3.5. Altitude verification

Traditional methods of altitude verification per paper printout are not accepted for the Online Contest. All altitude records should be contained within the appropriate fields in the IGC file.

Barometric altitude and GPS altitude will be treated similarly and are both accepted within the IGC file.

Calibration errors between barometric and GPS altitude of up to 15 minutes within the IGC file will generally be accepted, however the pilot should ensure that the system clocks of both instruments are synchronised before launching.

Point 6.1 in these regulations defines when altitude verification is required for scoring a flight.