Agenda for 2000 CIVL Meeting, Sitges, nr Barcelona, Spain

Timetable

Friday Feb 25, 10.00hrs: Plenary opening. Plenary and Working Group activity until
Sunday Feb 27. 1200hrs, Plenary close.
Sunday: 1400-1600 hrs Jury and Steward workshop
Sunday evening. Bureau review (dinner)

Draft agenda

1. Approval of the Minutes of last meeting: Available on Website. NOTE, not circulated with this agenda
2. Report of CIVL President
3. Report of FAI Sec General
4. Written reports from subcommittee chairmen: (if not circulated with this Agenda, will be available at meeting)

4.a. Sub-committee Chairmen:

Sporting Code Section 7: Michael Zuapanc (+ DRAFT 4)
Accuracy: Riikka Vilkuna (+DRAFT 3 from Slovenia)
HG Comps: Dennis Pagen (+ Draft 4)
PG Comps: Howard Travers
World Air Games: Olivier Burghelle
Safety: Klaus Tänzler

Proceedings from these Sub-committees and the associated Working Groups will be dealt with as Item 15 of this agenda.

5. Treasurer's report
6. Review of past championships: Available on Website. NOTE not circulated with this agenda
7. Bids, 2002 and advanced notices of interest
8. Budget etc Proposal for increasing the cat 1 sanction fee (DRAFT 1)
9. Competition schedule (+DRAFT 2)
10. Implementation procedure for pilot qualification requirements (+ DRAFT 5)
11. Presentation of FAI medal
12. PR Officer's report
13. GAP and RACE reports
14. WHGS report
15. Recommendations resulting from sub-committee/working group deliberations:
16. World Air Games. S Medven (Provisional)
17. Diplomas
18. Elections
19. Date and venue of next meeting
20. Any other business
21. President's closing remarks

Note : DRAFTs provided:
1: Proposal for increasing the Cat 1 sanction fee
2: Competition schedule 2000
3: Accuracy scoring proposal
4: OB: Proposed revisions to Section 7
5: Proposed Procedure to control pilot qualification for the Cat 1 events in 2000

Draft 1

PROPOSAL FOR INCREASING THE CAT1 SANCTION FEE

It is the opinion of the President and Treasurer that currently the budget of CIVL is in deficit.
We can support it on our reserve for a while, but we must increase the sanction fees to achieve balanced accounts in the near future. The fees have been unaltered for several years.
If the following proposal is accepted at the next Plenary, it will not apply before the year 2003 as the 2002 bids are going to be awarded on the present sanction fee.

Bureau propose an increase of Sfr 1000 for a continental meet and Sfr 2000 for a World event. The existing concessions for new championships will continue and the possibility of negotiation when the entries are less than 75 will remain. Implementation to be January 1 2003.

O Burghelle, November 1999

Draft 2

Hang Gliding and Paragliding

Category 1 Championships 2000

16-24 June: World Female Hang Gliding Championships, Greece

10-22July: European Hang Gliding Championships, Austria

28 July– 5 August: World Speed Gliding Championships, Greece

28July – 13 August: European Paragliding Championships, Germany

12-18 August: Paragliding Accuracy Championships, England

26August-2 September : Pan-American Hang Gliding Championships, USA

Pre and trial events

22-24 June: Speedrun Hang Gliding, Austria

27 June-8 July: Spanish Open Hang Gliding Championships
(Pre-event for World Air Games HG, 2001)

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AERONAUTICAL ASSOCIATION OF SLOVENIA
Sub-committee for paragliding

Ljubljana, 12 October 1999

C I V L

Attn.: Mr Olivier Burghelle, President

Discipline: Paragliding Accuracy

Re.: Proposal for amendment of proposed rules

Dear Mr President,

We are writing to let you know the proposal for the solution of the problem of interference in parachuting and paragliding accuracy championships with regard to proposed rules for the world championship in paragliding accuracy in the year 2000.

1. Description of issue

For the year 2000 the first world championship in paragliding accuracy has been foreseen. In view of that in August 1999 the pre-world championship took place in Middle Wallop, United Kingdom. In that, very good organized event 84 competitors from U.K., France, The Netherlands, and Slovenia took part. Amazing was the structure of diversity of wings used for competition. The vast majority of wings were parachuting (Parafoil,…) and paracsending and only 9 wings (8 from Slovenia and 1 from U.K.) were paragliding.

The competition was held according to the rules for parachuting accuracy, meaning that the proposed rules encourage the development of paragliding accuracy in the direction of parachuting accuracy and the competition is not stimulating and natural for paragliding wings. The only difference in comparison with the parachuting accuracy is the way of gaining the height.

2. Proposal

Aiming at the creation of a natural and logical difference between parachuting and paragliding accuracy we would like to propose that an article be added to the currently proposed rules by which a fall at landing be penalized by penal centimetres:

Additional article: in case that a competitor falls at landing a penalty of 200 cm shall be added to the measured result with the sum representing his result in that jump.
A fall means that a competitor touches the ground (the pad) with any part of the equipment or body except his feet prior to the wing touching the ground.

3. Explanation

By proposed amendment to current rules no type of parachute presently used for competitions in accuracy shall be excluded whereas a natural difference in landing manoeuvre of various parachutes shall be included in the discipline of landing accuracy.

According to these rules competitions in paragliding accuracy have been organised in Slovenia for five years (Slovenian Cup 10x per year, Nationals, Super Cup) and over 100 pilots have taken part in individual contests. Among participants in our contests are also individuals from the neighbouring and other countries, e.g. Austria, Italy, Czech Republic, Croatia, Hungary. The same rule of landing without a fall is in force also in these countries; however, competitions there are not being organized through the national association but have rather a more local and occasional character respectively.

This rule has an important influence on the safety of landing since a competitor is interested in a safe landing which can be controlled. In Slovenia there have been practically no injuries in competitions in paragliding accuracy. For safety reasons a proposal for a similar rule has been given also on the part of the British (D.W.: “How safe is the Accuracy Sport?” - Tow Lines, International Newsletter, Summer Edition, Issue 3, 1999).

We believe, that there is not a goal to have two similar parachuting accuracy competitions with two different names. In the future a World Championship will be the most important factor to motivate and guide paragliding accuracy discipline. We are of the opinion that by accepting the proposed rule the future of the paragliding accuracy discipline as well as a natural guidance of its development will be assured.

Yours faithfully,

Aeronautical Association of Slovenia
Secretary General
Stefan Zuna

Sub-committee for Paragliding
Jurij Vertacnik

Proposed modifications for Section 7 rules. 15/12/99

Additions are in blue underlined, deletions are in ~~red struck through~~, and comments (only for purpose of explanation) are in *green Italics*

SECTION 7 INDEX

1.4 General requirements for hang gliders

1.4.1 *Definition of hang glider (GS Chapter 2).* A glider capable of being carried, foot launched and landed solely by the use of the pilot's legs.

1.4.2 *Classes of hang gliders.*

1.4.2.1 Class 1: hang gliders having a rigid primary structure with pilot weight-shift as the sole method of control, and which are able to demonstrate consistent ability to safely take-off and land in nil-wind conditions (see Note). Subsidiary controls affecting trim and/or drag are permitted, but only if they operate symmetrically.

1.4.2.2 Class 2: hang gliders having a rigid primary structure with movable aerodynamic surfaces as the primary method of control in any axis, and which are able to demonstrate consistent ability to safely take-off and land in nil-wind conditions (see Note).

1.4.2.3 Class 3 hang gliders having no rigid primary structure (paragliders), and which are able to demonstrate consistent ability to safely take-off and land in nil-wind conditions (see Note).

1.4.2.4 Class 4: hang gliders that are unable to demonstrate consistent ability to safely take-off and/or land in nil-wind conditions, But otherwise are capable of being launched and landed by the use of the pilots legs.
The class of a glider will be determined by a CIVL technical group see annex 14.

This is to clarify exactly what aspects of the hang glider definition that class 4 allows to be ignored. Prevents a conventional sailplane (or similar) being used at a tow comp.
Furthermore the discussions about defining classes by video evidence from a manufacturer or whatever is dubious because the hang glider definition lists what "the pilot" can or cannot do with his legs. Not some other pilot.

1.5.12.1 The landing :
The point and/or time at which any part of the hang glider or its crew
a) first touches the ground or, (if specified in local regulations)
b) comes to rest after landing.
c)the pilots best position on course as evidenced by an approved GPS flight verification system.

5.4.4 The title of world or continental champion shall be awarded only if there have been at least ~~four~~ one separate championship flights in the class. If there is to be a cut in the number of competitors during the event, this shall not take place until 4 valid tasks have been flown. In the event of continued bad weather a task may be set on the day reserved for the prize-giving, in order to validate
The championship, but the total championship period may not be extended.
The competition organisers must avoid dangerous overcrowding in the air
As a guide, tasks shall not be organised in a way that groups of 100 pilots or more would be together in the air. If the competition organiser wishes to exceed this limit, he/she must substantiate the reasons why this will be safe to the CIVL plenary. The details shall be covered in Local Regulations.
For the competition to be valid there needs to be at least one day with a minimum day quality of 0.2. *This rule is proposed as a means of satisfying commercial sponsors, and not necessarily taken as a measure of competitive validity??*

5.6 Responsibilities of the organiser and the director

5.6.1 The NAC organising the championships shall appoint a Championships Director acceptable to CIVL not less than six months before the event. Any change of Director must be approved by the CIVL Bureau. The

Director shall take overall operational responsibility for the event including the programme of tasks to be flown. He is also responsible for:

- publishing a final entry list by the start of briefing on the first flying day
- issuing the daily results with minimum delay
- reporting the full results, including details of protests or serious problems encountered, to his NAC with copies to FAI and CIVL

The ~~Director must be able to~~ briefings must be conducted in English only.
(when briefing are translated, the translation is always slightly different and creates confusions)

5.6.3 Safety group. A safety group has to be elected by the pilots. The meet director has to consult the safety ~~group before setting the task.~~
Task Advisory Committee (TAC). This shall be a small committee which will include at least one elected pilot and an FAI Steward. Task setting and selection remains the ultimate responsibility of the Meet Director, but a task will not be flown without prior reference to the TAC.

5.6.3.1 Safety Committee A Safety Committe must be formed consisting of the meteorologist, launch Director and one Jury member. The Safety Committee's duty is to monitor the flying operations and report to the meet Director when conditions become unsafe either on launch or on course. If the MD chooses not to suspend flying when the Safety Committee deems conditions unsafe, the Committee may suspend flying.
(The Meet Director is responsible for determining safe or unsafe conditions in normal situations while the Safety Committee serves as a check and balance for safety considerations. The ultimate responsibility for a pilot's safety lies with the decision of the pilot himself and is not guaranteed by the actions or decisions of the meet director or the safety committee. This rule is intended to enhance safety by providing another layer of objective judgement.)

5.8 Stewards and Jury

5.8.1 Powers and description of Steward

Are detailed in 4.3.4.2 of the general section

The organisers shall appoint one or more stewards according to the needs of the championship. If an entry of more than 100 is expected, at least two stewards are required. Stewards shall be of different nationalities, and not that of the organiser, and be approved by CIVL. However, in the event of the last-minute absence of an appointed steward, a replacement of any nationality, and acceptable to the President of the Jury, may be invited. Stewards must be able to speak a common language, preferably English, and have extensive experience of international hang gliding or other FAI competitions. At least one steward should, if possible, be able to speak the language of the organisers.

Supprimé :

A minimum of one steward shall be present at each site during competition operations.

5.8.1.1 The steward cannot override the decisions of the championship director, but the steward should point out to the championship director that his/her actions may fail under a protest.
The steward must report to the jury president if rules are not being applied. Under 4.3.2.4 of the general sect, the jury president can temporarily stop the event until the jury meets to decide on an issue

General section 4.3.4.2 states duties of steward,

5.8.2 Powers and description of Jury.
Are detailed in 4.3.2 of the general section

5.9 National entry

5.9.1 The organisers shall state in the Local Regulations the maximum number of hang gliders which may be entered by a NAC, the maximum number of each sex a NAC may enter in each class (if required), and the maximum number of pilots constituting a national team. After the start of flying on the first scheduled competition day no change of pilot may be made.

5.12.2 Each competing glider shall be of sufficient performance and standard of airworthiness to meet the demands of international championships. This could be demonstrated by a valid certificate or statement of airworthiness provided by the NAC entering the glider. **For Class 3 (paragliders) it must be based on a paraglider certification or a prototype certification from a CIVL-recognised test organisation. A prototype certificate requires a load test and a declaration of line specifications signed by the manufacturer and the testing body. See Annex 11"Paragliding Line Certificate".** The organisers have the right to refuse any glider not of acceptable standard or configuration.

A Glider showing an certification certificate produced by a CIVL recognised testing body, cannot be changed in any way in its configuration. A glider that have been changed in its configuration even slightly in comparison with the tested model or a glider that have not been tested is considered as a prototype and must comply with the following requirements :

1° Each glider must have a serial number for identification
2° Produce the manufacturer agreement for a nominated pilot to fly the prototype
3° For a Paraglider a prototype certification from a CIVL recognised test body, that requires a load test and a declaration of line specifications signed by the manufacturer and the testing body. See annex 11 "Paragliding line Certificate"
4° For a paraglider, a manufacturer certificate guaranteeing that the prototype meets the AFNOR competition standards.
5° For hanggliders see Safety standards requirements in annex 16

5.15.2 After registration the first scheduled competition day no changes of pilot or glider may be made except as specified under the conditions of 5.18.4 (Damage to a competing glider).

5.19.7 Suspension or cancellation of a task. The Director may cancel a task before any competitor has taken off if the weather becomes unsuitable. The Director has the power to suspend or cancel a task after some or all pilots have taken off only in an emergency resulting from hazardous weather or other conditions which could not be avoided by the pilots and which would endanger their safety. If ~~flying~~ launching is suspended only for a short period the Director need not cancel the task. Information on the reasons for and provisions for cancellation have to be stated in the local regulations and announced in the briefings. If the task is cancelled, goal will be closed at the time of cancellation, and pilots score will be determined from their GPS position at the time of cancellation. Some nominal amount of points may be awarded to pilots who do not present a satisfactory track log. No other means of flight verification will be accepted for evidence of the finish of flight (including photographs)

Supprimé :

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Supprimé : would be announced shall

5.18.2 Airworthiness. Each glider shall be flown within the limitations of its certificate of airworthiness or permit to fly and its manufacturer's published limitations. Any manoeuvre hazardous to other competitors or the public and unauthorised aerobatics are prohibited.

5.19.8 Aerobatics. Unauthorised aerobatics are prohibited.
~~(redondant with the 5.18.2 above~~

5.19.10 Pilots shall ensure that they have a proper hang check/leg loop check immediately prior to launch

5.25.4 In Category 1 PG events Championship tittle will be awarded in both Open and Serial Class. At present a Serial Class is a catalogued model on sale to the genaral public, which complies with AFNOR 3Performance " rating or DHV " 2-3 ". It must be unmodified

The following will allowboth classes to compete, while leaving flexibility for countries to choose the make-up of their teams within practical overall size

- In the table below the first figure shows the overall number of competitors that are permitted to participate from each country. The figures in brackets show how the entry must be shared between the sexes. e.g. Where the permitted national team size is 7, no more than 5 can be from one sex. The figures in the second column are the number of pilots whose scores are counted towards the team score each day, in each class. There are separate team awards for Open and Serial classes.

At Championships, countries may enter competitors as follows:

Overall permitted national entry (total of both classes), divided between sexes as shown.	Numbers scoring each task
3 (2+1)	1 from each class
4 (2+2)	2 "
5 (3+2)	2 "
6 (4+2)	2 "
7 (5+2)	2 "
8 (6+2)	3 "
9 (7+2)	3 "
10 (8+2)	4 "

The Female Championship will be awarded for each class, provided that the entry comprises a minimum of eight pilots from four countries.

5.27 Start of a task

5.27.1 The organisers may use any of the following start systems as agreed by CIVL at the time of the acceptance of the bid to run the championships. The local regulations shall state which is to be used. The local regulations must state the minimum length of time that the launch window must be open for the round to be considered valid. This length of time will be based on the number of competitors and the number of the launch points available. It is recommended that there is at least one launch point for every twenty-five pilots.

5.28.5 In classes 1,2 and 4 a pilot is considered to have crossed the finish line when the nose of the glider cuts the finish line in the correct direction, using only the energy of the glider but not of the pilot. In class 3 the line is crossed when the pilot's foot cuts the line under the same conditions. A maximum height may be specified, below which the pilot must fly to be judged to have crossed a goal line. The line will be defined as a straight, vertical plane which will be accurately marked in such a way so that the goal marshal can properly control finish times. The physical marker on the ground will match the vertical plane as accurately as practical and act as a guide so that the pilots can see where the finish line is.

5.29 Outlandings

5.29.1 If a pilot lands away from the designated goal for the task he must inform the organisers in person or by telephone, or radio (if permitted), with the minimum delay, at the latest by the closing time for the task. On return to base he must go to retrieve control with his report and films and/or GPS unit. Failure to follow this procedure without good reason may result in the pilot not being scored for the task, or in charges for any rescue services which have been called out.

5.29.2 Landing evidence shall be from photographs (6.6.7.d/) and/or GPS track log as evidenced by an approved GPS flight verification system (annex 15) and if possible the name and address of a witness other than a member of pilot's national team.

5.29.3 Photographic evidence of an advanced position on course will not be accepted as a "landing position", however, when an approved GPS flight verification system is being used, this evidence can be used to claim a pilots best position on course as the pilots finish of the flight (landing position).

5.31.9 A competitor who lands specifically to help an injured pilot should not be disadvantaged by this action. However, points awarded in compensation are at the discretion of the Director who is required to take all the circumstances into consideration before awarding them. The competition director shall state the policy of awarding points in this circumstance before the start of the event. For guidelines to this see annex 12 (or whatever)

5.33.5 Team scoring. The number of pilots whose scores contribute to their team's score daily is calculated according to the formula: *50% of maximum permitted team size, rounded up, when necessary, to the next whole number*, e.g. if 7 pilots from one country may enter the class, the scores of the top 4 each day would contribute to the team score.
This rule does not apply for Class 3 championships when open class and Serial class are scored. In that case refer to 6.25.4

5.35 Un-sportsmanlike behaviour

5. 35.1 Un-sportsman like behaviour of team leaders or pilots will be penalised as described in annex 13

6.1.3 In championships, verification of the landing place may be made from photographs taken of the glider on the ground by the pilot and, if possible, the signature and address of a witness.

6.1.4 In championships, verification of the landing place may be made from a GPS track log as evidenced by an approved GPS flight verification system. See annex 15

6.5.2 For championships, finish lines (goal lines) shall be approximately 50 m long and clearly marked on the ground. The ends shall be indicated by vertical masts carrying windsocks. Further markers to aid identification of goals from a distance should take the form of large white flags or banners (minimum 2m x 1.5m) placed just to the right of the goal line when viewed from the correct direction of approach. The goal line material material on the ground is an aid to the pilots to help them see the approximate vertical plane of the goal.

6.6 Photographic evidence

6.6.1 If photographic evidence is used, no other evidence is admissible apart from a properly controlled, approved GPS flight verification system (annex 15), except that evidence of crossing a finish line may be from ground observers.

6.6.8 Photo Sector. The photo sector is a quadrant (90 degree sector) on the ground with its apex at the turn point. It is orientated symmetrically to and remote from the two legs of the course which meet at the turn point. For championships the radius of the quadrant is 1 km. In championships the Director may vary the sector to lie between two unmistakable linear features on the ground provided that the sector is not extended beyond 150 degrees. If possible the turn point should be one specific corner of a square or rectangular building. In any case it must have a vertical feature.

The photograph may be taken from higher or lower than the turnpoint provided the turnpoint is clearly visible in the picture.

Annex 2

SCORING SYSTEMS

The previous wording kept referring to "scoring systems" (plural), yet only one system was ever detailed. The system detailed was Mollo's system, which he dumped in favor of GAP.

A scoring system shall be tested at a major competition before it is used in a first category event. The following scoring system~~s have~~ has been successfully employed in past events. They are ~~similar in that they have elements for pilot speed, the distance flown and allow for rounds to be devalued if the weather or task are less than ideal~~.

The scoring system must be consistent with local regulations, which should specify in detail the way in which any variable within a formula is to be determined. It is also important that the design of the competition, especially the selection of tasks and local factors complement~~s~~ the scoring system ~~selected. Even in the most unlikely scenarios must be tested to ensure that no anomalies arise. It is important that the exact methods of determining N_{FLY} and N_{PILOTS} is clearly established~~.

Replace with GAP explanation .doc

G A P 2000

There will be small changes to some details in this document soon

User guide to the International Scoring System

GAP scoring was developed for CIVL by Gerolf Heinrichs, Angelo Crapanzano and Paul Mollison.

The idea was to get a fair scoring easily adaptable to any competition everywhere in the world, both for hang gliding and paragliding, with a philosophy that is easy for the pilot to understa nd, regardless of the mathematical complexity.

You can also Erreur ! Source du renvoi introuvable. this page as a Word 97 document (106k).

To compare different tasks within the competition and to adapt the scoring to hang gliders or paragliders, different flying sites, pilot's level and task philosophy, before the competition the meet director sets some parameters.

NOMINATION BY ORGANISER

Nominal Distance: the minimum task distance that should be worth 1000 points. (In the Alps, for hang gliding competition is suggested 50-70 km, for paragliding 30-50 km). If a task distance is less than the Nominal Distance, the day will be probably de-valued. There is no penalty for a task that is longer than the Nominal Distance as long as the task results in an even distribution of the pilots along the course. There would also be no penalty if the Nominal Distance parameter was set shorter, as long as it would take a reasonable length of time for the pilots to fly this distance. What constitutes a "reasonable length of time" is explained further down the page.

Minimum Distance: the distance awarded to every pilot who takes off. It is the distance below which it is useless to measure pilot's performance. This distance should be at least one tenth of the Nominal Distance. (In the Alps for hang gliding or paragliding competitions 8-10km is suggested). The minimum distance is there so that pilots who are about to "bomb out" will not be tempted to fly into the next paddock to get past a group of pilots. It is not in the interests of safety, retrieval or landowners to encourage pilots to try to stretch their flight when they clearly have been beaten on the day by either poor weather or a poor flight.

Nominal Goal %: the percentage of pilots in goal the meet director would wish to have in a well-chosen task. (For national competitions it is suggested to use 20-30%)

Nominal Time: equivalent in time to Nominal Distance. It is the fastest elapsed time, below which the task should be devalued. It can be considered as the time necessary for the fastest pilot to fly the Nominal Distance. (In the Alps for national competitions, it is generally suggested 2 hours). There is no penalty for having the fastest pilot take longer to complete the task. Nominal time is also a consideration in the departure bonus (see the departure bonus section)

Nominal Distribution is a direct consequence of the first three parameters and the maximum distance flown on the task. This is represented on the distance validity graph.

Keep in mind: that to get a fair competition task, You should normally have pilots in goal and pilots need to be in the air for a period of time so that the competitors make a series of different decisions, thereby sorting out the best pilots from the good ones.

If a pilot reaches goal with two thermals, then this is not necessarily a good test of skill. This task may have a tailwind and a high cloud base and therefore could be maybe, 100 km long (Or it could just be a short task). In this case the fastest time can still be short and the day will be de -valued because of the **Nominal Time** factor. In this case there was not much scope for the pilots to make decisions, so therefore the day was not such a fair test of skill.
It is important to remember that it is mainly time in the air (to make decisions about the flight) that separates different levels of pilot skill. Set tasks that will take a reasonable amount of time to complete and have no difficult part at the beginning. A good task will have pilots making many decisions in the air, and the pilots who do not reach the goal would be landing evenly along the course.

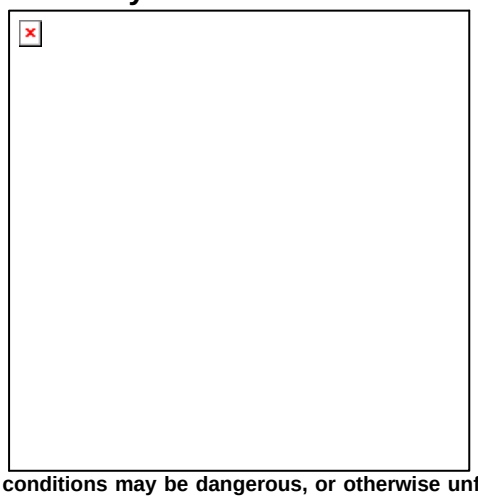
How to chose the parameters:

The Nominal Distance is the minimum distance that would still result in a good task worth 1000 points. The Nominal Distance ties in with Nominal Time, and these two parameters need to be considered together.
If a task distance is less than the Nominal Distance, the day will probably be de -valued. There is no penalty for a task to be set that is longer than the Nominal Distance as long as the task results in an even distribution of the pilots along the course.
The suggested distances are not mandatory, as what makes a good minimum task length depends on the terrain, the weather that would normally be expected for the duration of the competition, and the level of skill that you would expect from the pilots in the competition.
Minimum Distance is the distance that, generally, a normal pilot will easily achieve, for example climbing over takeoff and gliding down. It shall not be less than 1/10 of Nominal Distance.
Nominal Goal % depends on the philosophy of the competition: for example, if it's a pure free distance competition where there are no goals, it should be set to 0%. While if it's a pure race competition where it's expected to have everybody in goal everyday, it could be set to 100%.
Of course these parameters could not be changed during the competition and are extremely important to get correct results; be careful!

Day Quality

Day Quality varies between 0 and 1 and measures how suitable a competition day is to evaluate pilot's skill. It is obtained by multiplying the three validity coefficients. Launch Validity, Distance Validity and Time Validity

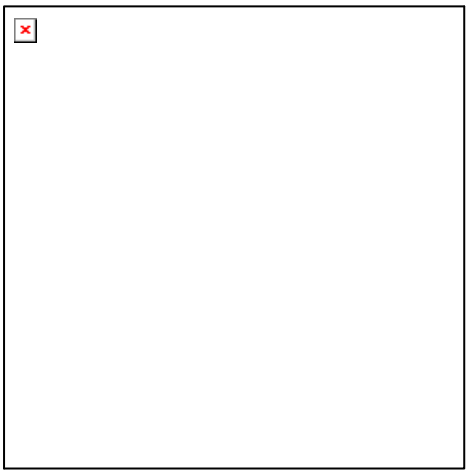
Launch Validity



Coefficient depending from the percentage of pilots actually present in takeoff who launched.
If everybody launches Launch Validity is 1 while if only 20% of the pilots present in takeoff launches it's about 0.1

Launch conditions may be dangerous, or otherwise unfavourable. If a significant number of pilots at launch think that the day is not worth the risk of launching, then the gung-ho pilots who did go will not get so many points. This is there as a safety mechanism.

Distance Validity

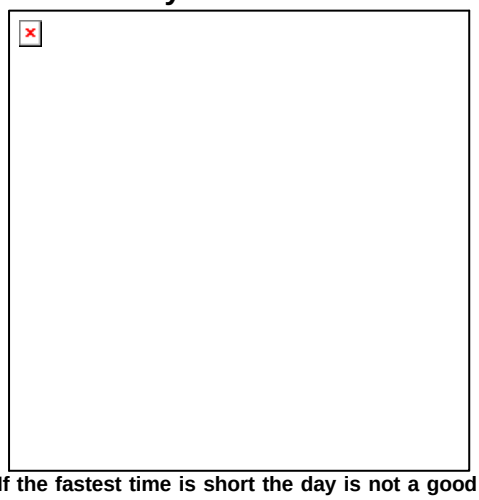


Coefficient depending from the ratio between Actual Distribution of pilots along the course and the Nominal Distribution.
The plus areas increase Distance Validity (max =1) while the minus areas decrease the value.

If there is an inconsistent distribution of the pilots along the course (for example many pilots bombed out, or there was an area of poor lift somewhere on the task) it means the day was inconsistent and luck could have played a major factor in the results. In this case the day will be devalued to give good pilots the possibility to catch up.

Keep in mind: If you set tasks that are longer than the nominal distance, the day will not be de-valued because of **Distance Validity** if less than the nominated % reach the goal, as long as a fair percentage of pilots fly a good distance. This sounds like a vague statement, but the task setter should be trying to set tasks that are reasonable for the day and for the pilots to do. If everyone lands in goal you must ask if this was a valid test of skill (it probably was if the fastest time and the distance flown were reasonably long). If everyone lands short of goal, was it an unsuitable task but still a good test of pilot skill? You also can have the case where a task that is shorter than the **Nominal Distance**, has a **Distance Validity** of 1. This will happen when a large percentage of the pilots fly a large percentage of the course but in this case you still have a practical devaluation because there is little spreading between the scores.

Time Validity



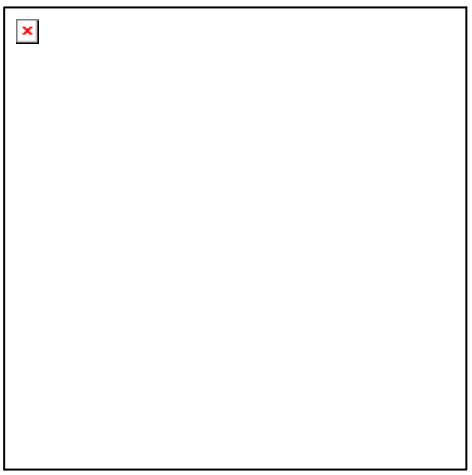
Coefficient depending from the Nominal Time and the fastest elapsed time.
If the Fastest Time is longer than Nominal Time, then Time Validity is always 1.

If the fastest time is short the day is not a good measure of pilot skill because there would not be many decisions to make and because of this, luck can distort scores as there will be little possibility to recover any loss of time

Keep in mind: **There needs to be reasonable parameters set and the task setter needs to set reasonable tasks.**

Points Allocation

The available points for each task (1000*DayQuality) are allocated to Distance Points, Speed Points, Departure Points, Arrival Points, using a function of the percentage of pilots in goal compared to launched pilots.



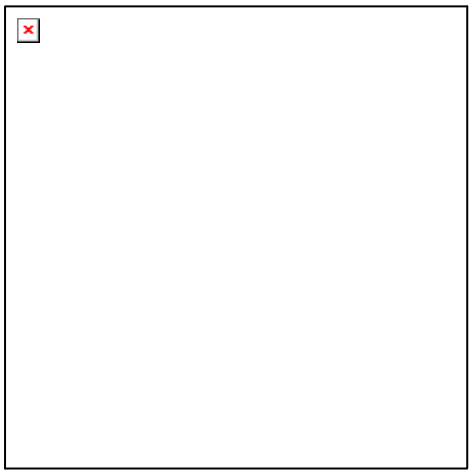
Out of the total of 1000 points that are available for a task, and 25% of launched pilots made goal, there are available approximately 590 points for Distance, 300 points for Speed, 60 points for Departure and 50 points for Arrival.
If nobody gets goal there are a maximum of 900 points available for distance.

Keep in mind: **That if a good days flying does not produce 1000 points, that does not matter as long as there is a reasonable spread of points in between pilots. On a good day there might be say 500 points separating a good pilot and an average one. What results from this is a concept called Task Weight. A day that has a small spread of points between pilots will have less weight towards the final scores.**

Pilot Distance Score

One half of the available distance points are assigned to the pilots linearly with the distance flown while the other half is assigned taking into consideration the difficulty of the kilometres flown.
To measure the relative difficulty of each kilometre we consider the number of pilots landed in the successive few kilometres.
With this system each km has a different value depending on the relative difficulty (for example upwind and downwind) but, nevertheless, it's easy for the pilot to judge this value because it depends from the number of pilots that will land in that area.

Graphical example:



Note that the slope becomes steeper before the area where more pilots landed and less steep just after. There are two reasons for this: first, for safety (and retrieval) reasons, we do not want to encourage pilots to fly just after a group; second if you land somewhere probably it was difficult just before, then you glided a while before landing.

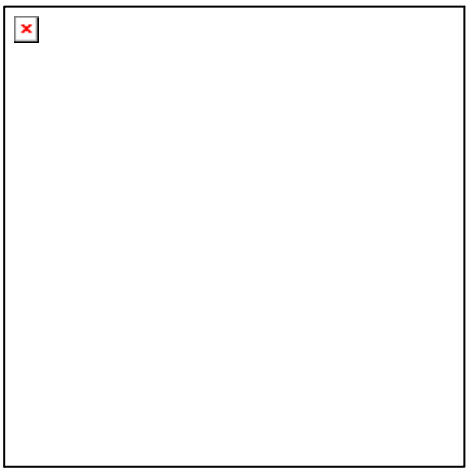
Keep in mind: If you are flying an easy part of the task, for example tailwind along a ridge, where nobody will land, you will get only half the points per kilometre compared to old linear scoring systems.

Pilot Speed Score

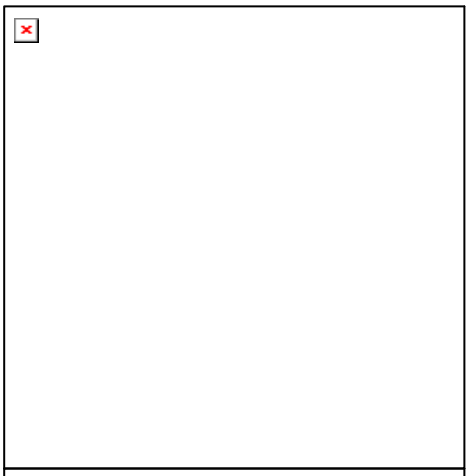
Speed points are assigned to the pilot with a function of Fastest Time and Pilot Time. Slow pilots will get zero points for speed if their elapsed time is longer than the Fastest Time plus the square root of the Fastest Time. (Time measured in hours)

Examples:

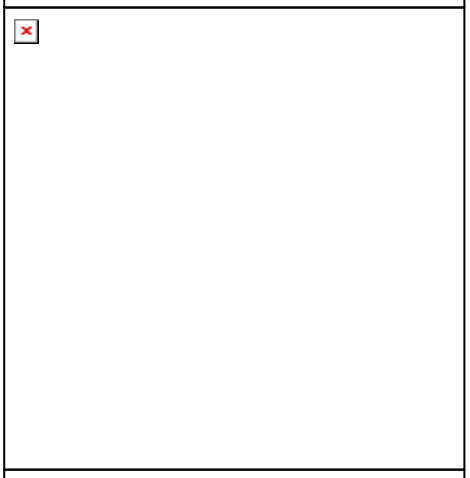
Fastest Time = 1 hour
80%ScoreTime = 1:05
50%ScoreTime = 1:21
Zero Score Time = 2 hours



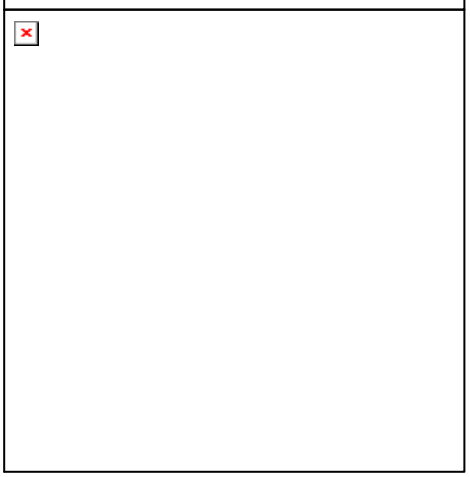
Fastest Time = 2 hours
80%ScoreTime = 2:08
50%ScoreTime = 2:30
Zero Score Time = 3:24
(or 3.4 hours)



Fastest Time = 3 hours
80%ScoreTime = 3:09
50%ScoreTime = 3:37
Zero Score Time =4.42
(or 4.7 hours)



Fastest Time = 4hours
80%ScoreTime = 4:11
50%ScoreTime = 4:43
Zero Score Time = 6 hours

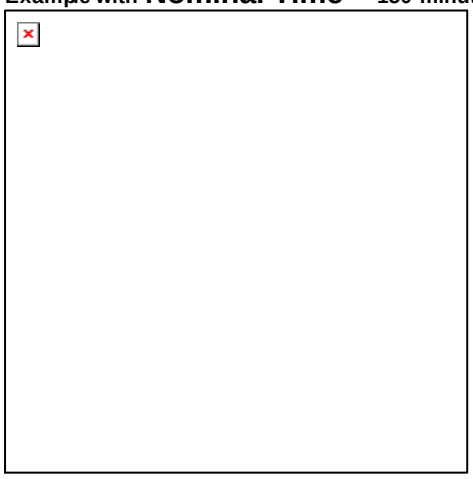


Keep in mind: **that if the zero speed score ratio is fixed, in a short task slow pilots will be more likely to get zero speed points and therefore there will be a group of pilots with the same (or very similar) points for the day. On a long task, those same slow pilots will run out of day and land before goal, hence getting rid of this evident anomaly. It is important to set tasks that require the pilots to be in the air for a reasonable amount of time.**

Pilot Departure Bonus

Known as the "early bird bonus" but better defined as the "leading bonus" is provided to encourage fast pilots to take off early and reward the risk involved in being in the leading group.
The maximum available points for each pilot are about 1/5th of his own speed points and are fully awarded to the first pilot who launches and also makes goal. Pilots not making goal are not considered for the departure bonus. (Probably in future versions of GAP, this 1/5th will become 1/4th thereby making it more rewarding for pilots to lead out in front). If the departure delay (the time difference in between the start of the first pilot in goal, and the start time of another pilot who makes the goal) is bigger than 1/3 Nominal Time, the departure bonus is zero.

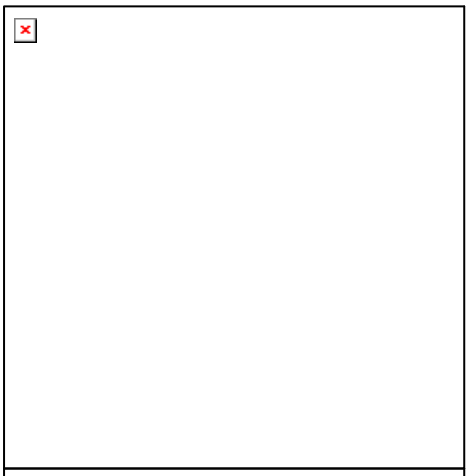
The other pilots will score accordingly to their speed points and their departure delay after the first pilot launched that made goal.
A fast pilot will get more departure points than a slow pilot taking off at the same time because he was probably leading for a longer time.
Example with Nominal Time = 150 minutes (2.5 hours)



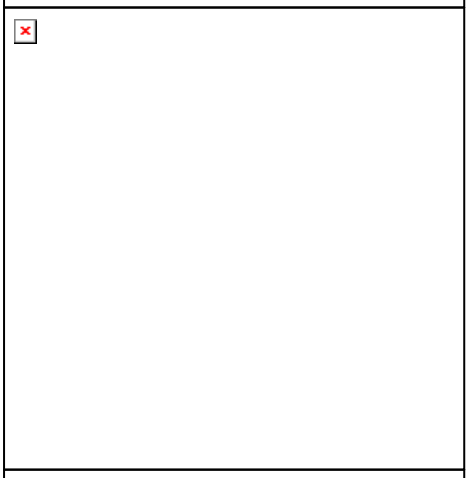
A pilot that launches with a departure delay of 1/10 of the Nominal Time will get a departure bonus of 0.47 his own speed points.
What is being achieved, is that fast pilots will get more points if they take off early, because they will stay in front for more time, and then collect an arrival bonus as well.
Keep in mind: Departure points are a percentage of your own speed points. If all the pilots start at the same time like in a pure race, departure points will still be different, because the fast pilots (who will get more arrival points as well in this case) will have the same percentage of a higher number of points. You could say that in tasks with a single start time for all pilots, speed points are effectively increased.

Pilot Arrival Bonus

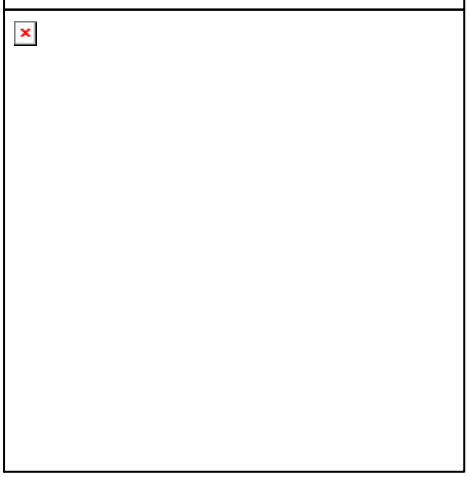
The Arrival Bonus is provided to reward pilots for racing to goal and is a pure position score, which considers the arrival position in goal.
The first pilot in goal gets the maximum available Arrival Points, the others get points accordingly to their arrival position regardless of time delay.
Examples:



3 pilots in goal:



10 pilots in goal:



25 pilots in goal:

The last pilot in goal will get a minimum of 20% of the available arrival points.

Keep in mind: **The departure and arrival bonus system is there to reward the pilot who leads out. If you lead out, you make decisions yourself, and you take more risks of bombing out or being slower. If you follow other pilots, you might get to goal with a fast time, but your points will be less than the pilot**

who flew with the same time (or maybe a slightly slower time) but who flew in front of you. The GAP formulas are designed to reward the pilot who makes the decisions.

Pilot Score

Pilot Score is, of course, the sum of Distance Points plus Speed Points plus Departure Bonus and Arrival Bonus

... and the best pilot wins!

Summary

The GAP scoring system rewards the pilot which takes his own decision and stays in front of the others. Waiting on takeoff for the others pilots to fly, then follow to go safer and faster, is a less valuable tactic with this scoring. With previous scoring systems the best tactic to recover points on your opponent was to start a few minutes after him, then catch him. His best tactic was to wait for you and fly with you. Everybody was always waiting on takeoff because both had to follow the same tactic! With this scoring system a good tactic to recover points to your opponents is to start early and fly fast. This way you force your opponents to take the risk with you, or wait for more pilots to be in the air for safer (scoringwise) flying.

With GAP scoring, even if the day quality is 1, the winner will automatically get 1000 points only if the task is a "race to goal". In an elapsed time task, the winner gets 1000 points if he is the fastest one and the first one to launch between the pilots that make goal. If nobody reaches goal the maximum available points is 900.

Note that, if DayQuality=1, even if the winner does not take 1000 points it is still a full value day because this does not influence other pilot's score.

Nice flying,

Angelo Crapanzano **-** Erreur ! Source du renvoi introuvable.

Michael Zupanc**-**Erreur ! Source du renvoi introuvable.

~~The form of the formula for each scoring system detailed below is:~~

~~***Pilots Score = 1000 (Speed Points + Distance Points) x Round Factor***~~

Variables used in scoring formulas are as follows:

Distance Variables (Usually measured in kilometers)

D_P Pilots Distance flown
D_{MAX} Maximum Distance Flown
D_{MIN} Minimum Distance to activate Scoring
D_{TASK} Task Distance

Time Variables (Usually measured in minutes)

T_P Time needed by the pilot to complete the speed section of the task
T_{MIN} Time needed by the fastest pilot to complete the speed section of the task
T_{AVG} Average time needed by all pilots to complete the speed section of the task

Pilot Variables (Number of Pilots)

N_{FIN} Number of Pilots to finish the speed section of the task
N_{HALF} Number of Pilots to fly a distance greater than half D_{MAX}
N_{MIN} Number of Pilots to fly a distance greater than D_{MIN}
N_{FLY} Number of Pilots to fly in the round
N_{PILOTS} Number of Pilots to enter the competition or in the group

C_R Completion Ratio

Normalisation

1. The leaders of each group must enter the final rounds with equal scores.

2. If the groups of the preliminary rounds have not flown an equal number of tasks, scores must be averaged across the groups before applying the normalisation factor to individual pilots' scores.

3. The precise normalisation method to be used shall be stated in the Local Regulations and approved by CIVL.

Annex 9

LOCAL REGULATIONS FOR

(EUROPEAN/WORLD)

HANG GLIDING/PARAGLIDING CHAMPIONSHIPS

AT .....

ON .....

ORGANISED BY .....

ON BEHALF OF THE
FEDERATION AERONAUTIQUE
INTERNATIONALE

~~Proposed deletions~~
Proposed additions

Cover page

How to use this Document

1. The text and numbering is not to be changed except with the agreement of CIVL at the time of making the Bid to hold the event. At this time the prospective organisers may propose additions or modifications to this CIVL Local Regulations document.

2. Spaces and items in brackets in this document are to be completed by the prospective organisers after agreement by CIVL. Section 7 references on the right are for use by team leaders, jury, etc.

3. The title page of the Local Regulations must include :

LOCAL REGULATIONS FOR THE

……..……

CHAMPIONSHIP

These Local Regulations are to be used in conjunction with General Section and Section 7 of the FAI Sporting Code. Reference numbers for Section7 used in this text should be cross-checked with the latest editio n of Section 7.

Full title of the championships

Location and country

Dates, including practice period, registration and opening ceremony.

Logo of FAI and of championships

Organised by the ..... Aero Club on behalf of the Fédération Aéronautique Intemationale

Address to which any correspondence should be sent in advance of the event, and address of organising National Aero Club.

LOCAL REGULATIONS

1. GENERAL

1.1 The purpose of the championships is to provide good and satisfying contest flying in order to determine the champion in each Class and to reinforce friendship amongst pilots and nations. (Section 7; 5.2.)

1.2 PROGRAMME

Training, hang glider inspection, registration	..... to .....
Opening Ceremony	.....
First Competition Briefing	.....
Contest Flying Days	.....
Closing Ceremony, Prizegiving (Reserve day or not)	.....

1.3 OFFICIALS

Director		.....
Deputy Director		.....
Key officials		
Meteorologist		.....
International Jury :	President	.....
	Members	.....
		.....
Stewards		.....
		.....
		.....

(Give nationality of Jury and Stewards).

		Section 7 References
1.4	ENTRY	
	The Championships are open to all Member and Associated Member countries of FAI who may enter any number of hang gliders not exceeding ------. of one sex and ----- of the other sex in Class ---- (If more than one class are run indicate for each class the team size. Not more than ----- may ~~be entered in any one Class.~~ Entries must be made on the official Entry Form which must include the entry fee, what is included and the closing date.	5.9.1.
1.4.1.	Applications, with fees paid, not received by the entry deadline may be refused.	
1.4.2.	To be valid a world or continental championship must have not less than 8 participants in a Class representing not less than 4 countries with entry fees paid and available to fly on the first day.	5.25.1
1.4.3.	The title of champion shall be awarded only if there have been at least ~~four separate tasks~~ one task in the Class.	5.4.4
1.4.4.	(Delete as required) There will be no cut during the championships OR There will be a cut after 4 valid tasks have been flown. The finals will consist of x % (not less than 60%) of the competitors in order of scoring. Pilots with equal scores to the lowest placed pilot above the cut shall continue to compete. A pilot whose score is not confirmed at the time of the cut but who would otherwise be eligible for the finals may continue to compete pending resolution of the matter.	5.32.1
1.4.5	If more than 125 pilots are expected indicate how state how you will comply with Section 7 rule 5.4.4	5.4.4

			Section 7 References
1.5.	INSURANCE		
	Documentary proof of insurance as specified on the Entry Form must be presented to the Organisers before the start of the championships.		5.13.1
1.6.	LANGUAGE		
	The official language of the championships is English.		
1.7.	MEDALS AND PRIZES FAI medals will be awarded to pilots placed first, second and third in each Class with Diplomas for those placed fourth to tenth. FAI medals will be awarded to national teams placed first, second and third. The Organisers will/will not award further trophies and prizes.		
2.	**CHAMPIONSHIP CLASSES**		
2.1.	The championship(s) will be held in the following Class(es). (Section 7 1.2.1) :		1.4.2
	CLASS 1	Hang gliders having a rigid primary structure with pilot weight-shift as the sole method of control, and which are able to demonstrate consistent ability to safely take-off and land in nil-wind conditions	
	CLASS 2	Hang gliders having a rigid primary structure with movable aerodynamic surfaces as the primary method of control in any axis, and which are able to demonstrate consistent ability to safely take-off and land in nil-wind conditions	
	CLASS 3	Hang gliders having no rigid primary structure (paragliders), and which are able to demonstrate consistent ability to safely take-off and land in nil-wind conditions	
	CLASS 4	hang gliders that are unable to demonstrate consistent ability to safely take-off and/or land in nil-wind conditions, But otherwise are capable of being launched and landed by the use of the pilots legs. The class of a glider will be determined by a CIVL technical group see annex 14.	

(Delete any Class NOT being held in these championships)

2.2.	Each Class is a championship in its own right and as far as possible interference of one Class by another shall be avoided.	5.25.2

		Section 7 References
3.	**GENERAL COMPETITION RULES**	

3.1.	REGISTRATION. On arrival the team leader and members shall report to the Registration Office to have their documents checked and to receive supplementary regulations and information. The end of the official Registration period is considered to be the official start of the championship. The following are required : Pilot qualifications Evidence of competitor's nationality Pilot's valid FAI Sporting Licence Receipt for payment of entry fees by the closing date. Satisfactory evidence of glider airworthiness Certificate of Insurance as detailed on Entry Form The Registration office will be open from ..... to ..... on ..... The closure of Registration is considered as the official start of the championship.	5.15.1
3.2	PILOT QUALIFICATIONS. : Refer to Section 7 ~~A competing pilot shall be of sufficient standard to meet the demands of an international competition and hold an FAI Sporting licence issued by his own NAC.~~ ~~As a minimum, a pilot should have ranked within the best 2/3 pilots of a FAI category 2 event during the last 3 years (his to apply from 2000)~~	5.11.1 5.11
3.3	HANG GLIDERS AND ASSOCIATED EQUIPMENT. : Section 7 ~~The hang glider and equipment provided by the competitor must be of a performance and standard suitable for the event. This could be demonstrated by a valid certificate of airworthiness or permit to fly provided by the NAC entering the glider. For~~ **~~paragliders it must be based on a paraglider certification or a prototype certification from one oft the CIVL recognised test~~ organisations. A prototype certificate requires a load test and ~~a declaration of line specifications signed by the~~ manufacturer and the testing body. See Annex 11 ~~"Paragliding Line Certificate". The~~** ~~organisers have the right to refuse any glider not of acceptable standard or configuration.~~	5.12
~~3.3.2~~	~~The glider shall fly throughout the championships as a single structural entity using the same standard of components as used on the first day.~~	~~5.12.3~~
~~3.3.3~~	~~All gliders must be made available during the Registration period for an acceptance check in the configuration in which they will be flown. the organisers have the right to inspect for Class conformity and airworthiness and, if necessary, ground any hang glider for safety reasons at any time during the event.~~	~~5.12.4~~
~~3.4~~	~~CONTEST NUMBERS.~~ The numbers or letters supplied by the organisers shall be displayed on the underside of the right wingtip with their top towards the leading edge, and on the pilot's helmet. Identification may also be required on the top of the wing. In Class 3 the numbers shall be placed on the underside of the centre of the wing, top towards the leading edge.	~~5.14~~
		~~**Section 7 References**~~

~~3.5~~	~~TEAM LEADER RESPONSIBILITIES.~~ ~~The team leader is the liaison between the organisers and his team. He is responsible for the proper conduct of his team members and for ensuring that they do not fly if ill or suffering from any disability which might endanger others, and that they understand the rules.~~	~~5.10.1~~
~~3.6~~	~~STATUS OF RULES AND REGULATIONS.~~ ~~Once competition flying on the first day has started no rules or regulations may be changed. Any additional requirements within the rules needed during the event will not be retrospective.~~ ~~Competitors may not be substituted, change to another Class nor change their glider (4.4 below).~~	~~5.5.6~~
3.7	REST DAYS. The Director may declare a rest day after six consecutive days flying except on the last competition day. The policy on rest days shall be declared before the first competition day.	5.23
3.8	COMPLAINTS AND PROTESTS. A complaint may be made to the organisers, preferably by the team leader in writing, to request a correction. It should be made with the minimum delay and it will be dealt with expeditiously. If the complainant is not satisfied with the outcome the team leader may make a protest in writing to the Director or his Deputy. (See General Section Chapter 5). The time limit for protests is ------- hours after publication of the provisional task results or the results of the complaint, except that after the last contest task it is ------ hours. The protest fee is ----------. It will be returned if the protest is upheld.	5.4.6
~~3.9~~	~~BRIEFING.~~ ~~Briefing for team leaders and/or competitors will be held on each flying day. Task, weather, airspace information and any special requirements will be in writing. Flight safety requirements given at Briefing carry the status of regulations. Attendance at Briefing is compulsory.~~	~~5.16~~
~~3.9.1~~	~~Team Leaders meetings, in addition to Briefings, may be called by the Director, but shall be held within 18 hours if requested by five or more team~~ leaders.	~~5.17~~
3.10	TAKE-OFF METHODS	
3.10.1	Foot Launch from hill site. Give information on : Site names, locations, height of take-off, layout and area of grid, etc.	
3.10.2	Aerotow. Give information on : Airfield name, location, size and layout of take-off area Number of tugs which will be available Tow rope length, weak link strength Aerotow release height, tug flight patterns and drop zones Requirements for base bar wheels and trolleys	

		Section 7 **~~References~~**
~~4.~~	~~FLYING AND SAFETY REGULATIONS~~	
~~4.1.~~	~~COMPLIANCE WITH THE LAW.~~ ~~Each competitor is required to conform to the laws and to the rules of the air of the country in which the championships are held.~~	~~5.18.1~~

~~4.2.~~	~~PREPARATION FOR FLIGHT.~~ ~~Each glider shall be given a pre-flight check by its pilot and may not be flown unless it is serviceable.~~	~~5.18.3~~
~~4.3.~~	~~FLIGHT LIMITATIONS.~~ ~~Each glider shall be flown within the limitations of its C of A or permit to Fly and its manufacturer's published limitations. Any manoeuvre hazardous to other competitors or the public including unauthorised aerobatics are prohibited.~~	~~5.18.2~~
~~4.4.~~	~~DAMAGE TO A COMPETING GLIDER.~~ ~~Any major damage shall be reported to the organisers without delay and the glider may then be repaired. Any replacement parts must conform exactly to the original specifications. If permission is given by the Director~~ to replace the glider temporarily or permanently for reasons of damage or loss or theft beyond the control of the pilot it may be replaced by (a) an identical make and model or (b) by one of similar or lower performance and eligible to fly in the same Class.	~~5.18.4~~
~~4.5.~~	~~TEST AND OTHER FLYING.~~ ~~No competitor may take off during a competition day from the contest site without the permission of the Director. This may be given for a test flight except that if the task for that Class has started the pilot must land and make a competition take-off on the task.~~	~~5.20.1~~
~~4.6.~~	~~PROTECTIVE EQUIPMENT. (See 5.19.2 for exceptions)~~ ~~Every pilot shall wear a protective helmet and carry an emergency parachute on all flights. (State any further safety equipment).~~	~~5.19.2~~
~~4.7.~~	~~FITNESS.~~ ~~A pilot may not fly unless fit. Any injury, drugs or medication taken, which might affect the pilot's performance in the air must be reported to the Director before flying.~~	~~5.19.3~~
~~4.8.~~	~~SAFETY AND COLLISION AVOIDANCE.~~ ~~Circuit, turning and landing patterns given at Briefing shall be complied with, international collision avoidance regulations obeyed and a proper look out kept at all times. A glider joining another in a thermal shall circle in the same direction as that established by the first regardless of height separation.~~	~~5.19.4~~
~~4.8.1.~~	~~A competitor involved in a collision in the air must not continue the flight if the structural integrity of his glider is in doubt.~~	~~5.19.5~~
~~4.9.~~	~~CLOUD FLYING.~~ ~~Cloud flying is prohibited. gliders may not carry gyro instruments or other equipment allowing flight without visual reference to the ground.~~	~~5.19.6~~

		Section 7 References
4.10.	BALLAST. A competing glider may carry jettisonable ballast only in the form of fine sand or water. A pilot must avoid dropping ballast at any time or in a manner likely to affect other competing gliders. For a PG Cat 1 meet use the PWC rule " The total ballast, including all flight equipment and the glider should not exceed 30 Kgs in addition to the pilot's weight. The Pilot's weight is defined as body weight when dressed in jeans,shirt and underwear. "	5.19.9

~~4.11~~	~~EXTERNAL AID TO COMPETITORS.~~ Any help in navigation or thermal locatio n by non-competing gliders including competing gliders not carrying out the task of their own Class is prohibited. This is to ensure as far as possible that the competition is between individual competitors neither helped nor controlled by external aids.	~~5.21~~
4.12	RADIO TRANSCEIVERS. (State if radio transceivers are prohibited or permitted. If permitted this article reads :) One transceiver is permitted in each competing glider, one for each team leader and one in each of a maximum of two retrieve vehicles. These radios are for communication between competitors and between them and the organisers. Only frequencies allocated by the organisers may be used. The above does not apply to ELTs incapable of voice transmission. The use of GPS, Decca or Loran Positioning systems during competition flights is/is not permitted. Give the Safety radio frequency	5.21.3/4
~~4.13.~~	~~FLIGHT BOUNDARIES.~~ ~~Flights terminating beyond the boundaries of the organiser's country shall score only to the point where a straight line between the start point or last turn point and the landing place last cuts the boundary, unless permission is given at Briefing to cross such boundaries.~~	~~5.30.1~~

		Section 7 References
5.	**CHAMPIONSHIP TASKS**	
~~5.1.~~	~~To count as a championship task all competitors in the Class concerned will be given the opportunity to have at least one contest flight with~~ time to carry out the task.	~~5.4.5~~
~~5.1.1.~~	~~The task for each Class may be different and a task may be set for one Class only.~~ ~~An alternative task may be given at Briefing for use should the weather change.~~	~~5.26.3~~
5.1.2.	RETAKE-OFF A competitor will be allowed ----- take-off(s) to attempt the task within the stated take-off period. 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. However, the pilot's take-off time will be taken from the time of the first take-off attempt.	5.26.5 5.28.2
5.2.	TASK PERIOD. Times of window open for take-off and times for the closing of the window, turn points and last landing will be displayed in writing. state the minimum length of time that the launch window must be open for the round to be considered valid. This length of time will be based on the number of competitors and the number of the launch points available. It is recommended that there is at leas t one launch point for every twenty-five pilots.	5.26.6 5.27.1

	If the start is delayed all given times will be delayed by corresponding amounts. The closing time (last landing time) is sunset/sunset plus 30 minutes or in high latitudes a time given in the Local Regulations unless all competitors have already landed.	5.26.6
5.3.	TASK SUSPENSION OR CANCELLATION. : Ref Section 7 The Director may cancel a task before any competitor has taken off if the weather becomes unsuitable. He has the power to suspend or cancel a task after some or all of the pilots have taken off only in an emergency resulting from hazardous weather or other conditions which could not be avoided by the pilots and which would endanger their safety. If flying is suspended for only a short period the Director need not cancel the task. Information will be given at Briefing on how any such cancellation would be announced.	5.19.7
		5.26.1 5.26.4
	5.4.	
5.5.	FLYING THE TASKS.	
5.5.1	A set course shall be flown in the direction specified at Briefing. Control at turn points will be by photographic evidence. (Section 7; 6.6).	5.28.1
5.6.	In classes 1,2 and 4 a pilot is considered to have crossed the finish line when the nose of the glider cuts the finish line in the correct direction, using only the energy of the glider but not of the pilot. In class 3 the line is crossed when a pilot's foot cuts the line under the same conditions.	5.28.5
5.7.	OUTLANDINGS. If a pilot lands away from the goal airfield or from base he must inform the organisers in person or by telephone or radio with the minimum delay and at latest by the closing time of the task. On return to base the pilot must report immediately to Control. Failure to follow this procedure without good reason may result in no score for the task, or charges for any rescue services called out.	5.29

		Section 7 References
5.7.1	The pilot should obtain the name and address of a witness to the landing from a person other than a member of the pilot's national team.	5.29.2
5.8	**5.31.9** A competing pilot landing to help an injured pilot should not, at the Director's discretion, be placed at a disadvantage by this action. The competition director shall state the policy of awarding points in this circumstance before the start of the event. For guidelines to this see annex 12 (or whatever) .	5.31.9
6.	**SCORING.**	
6.1.	[Insert Scoring system approved by CIVL when making a bid including method for normalising group scores (if needed). (Section 7; 5.32.)]	5.31, 5.33

6.2. 6.3.	Team Scoring. (Section 7; 5.9.) A team score shall be determined from the total scores of the top xxx pilots in each Class calculated on each scoring day. The scores of teams with less than xxx pilots shall be the scores of the participating pilots in that Class. (See Section 7, 5.33.5 to determine xxx) For scoring purpose, guest pilots are / are not counted as competing pilots.	5.33.5
~~6.4.~~	~~If the scores of the first, second or third in each Class are identical, the tie shall be broken by counting the highest daily positions of the tied pilots with the pilot, or team, having the highest number being declared winner. If this does not break the tie, the pilot or team with the largest number of lowest points is the loser.~~ Note. I don't know when this rule has been added, but it does not refer to any Section 7 rule so I recommend to delete it	
7.	**PHOTOGRAPHIC EVIDENCE.**	**6.6**
7.1.	If photographic evidence is used, no other evidence is admissible apert from a properly controlled, aproved GPS flight verification system (annex 15), except that evidence of crossing a finish line may be from ground observers.	6.6.1
~~7.2.~~	~~The camera lens must be of fixed focal length, between 30mm and 60 mm and take 35 mm film.~~	
~~7.3.~~	~~A film used for photographic evidence must remain uncut.~~	
~~7.4.~~	~~Data back cameras are permissible.~~	
~~7.5~~	~~If it is possible to alter the order in which the exposures are made or change the time shown on the film during the flight the camera must be sealed before take off.~~	
	~~Two cameras may be used but only one film will be used to verify the flight. Both films shall be handed in after landing marked 1 and 2.~~	
~~7.6.~~	~~Pilots are advised to scratch the competition number on the leader tongue of the film before loading.~~	
~~7.7.~~	~~Task Photos. The photographic evidence on each film must show as a minimum :~~	
	~~1/~~ ~~The task board showing date, task, official clock and pilot competition number. Alternatively this number may be shown on the pilot's helmet~~ or wing on the following photo.	
	~~2/~~ ~~Photo of the start point or start clock if applicable.~~	

		~~**Section 7**~~ **References**
	~~3/~~ ~~Photos of turn or control points in the correct or pre-declared sequence.~~	
	~~4/~~ ~~Photos of the same glider at its landing place before packing, showing its number together with identifiable evidence of the landing place.~~	

~~7.8.~~	~~Photo Sector.~~ ~~The photo sector is a quadrant (90 degree sector) on the ground with its apex at the turn point and orientated symmetrically to and remote from the two legs of the course which meet at the turn point. In championships the Director may vary the sector to lie between two unmistakable linear features on the ground provided that the sector is not extended beyond 150 degrees. If possible the turn point should be a square or rectangular building. In any case it should have a vertical feature.~~ The radius of the sector is 1km unless otherwise specified. The photograph may be taken from higher or lower than the turnpoint provided the turnpoint is clearly visible in the picture.	~~6.6.8~~

Annex 12

ASSISTANCE TO A PILOT IN DANGER

All pilots must pack their gliders immediately after landing: a glider lying open on the ground means "I need help!"
A pilot witnessing any kind of accident must try to inform the organiser as soon as possible using the safety radio frequency.

Calling procedure : "MAYDAY, MAYDAY, MAYDAY". Give details of :

- nature and location of the accident;
- position of the victim;
- name of pilot reporting the accident;
- description of paraglider in trouble.

RESCUE ACTIONS IN COMPETITION.

The objective :

- To propose to the pilots a list of things to do when they are giving assistance to a pilot.
- To propose to the organiser an idea for a procedure for the rescue service.
- To push the pilots to assume their responsibilities in case of an accident, avoiding the possibilities of an excess of zeal which could generate an excess of extra points.
- This list could be used by the organiser and/or the jury in order to attribute compensation points to the pilots who gave assistance.

Organisation duties :

- A radio arrangement that covers the whole course.
- To make clear & precise decisions with the injured pilot and/or with the pilot who is giving assistance.
- If possible put the rescue aid in touch with the accident area.
- Transmit all information to the rescue aid (general state of the injured, location, etc...)
- Cancel the rescue action (if needed) if it was asked by some external persons from the competitions.

Obligations of the injured pilot :

If he is still alive, the pilot must :

- Be in radio contact with the organisation or with a pilot who is in the air.
- Throw a flare.
- Give his geographical position, his altitude, GPS co-ordinates, colour of his glider, his name, Contest n°, his general state.
- Estimate the general help (rescue action by helicopter or by land)
- Stay in contact with the organisation and follow the instructions.

Pilots obligations : protect-alert-rescue action .

Before landing :

- Take some landmarks in order to facilitate the location of the accident zone and the altitude of the accident and the GPS co-ordinates.
- To make contact with the organisation from the air by radio or by mobile phone (better radio contact).
- Alert message like :
  - My name is...number....
  - I am a witness of an accident at such place.
  - The injured has a glider of such constructor, such colour,..
  - I can/can't land close to him
  - What must I do ?
    if possible.
  - His name is....his number is.....
  - Can he speak, can he move ?

Waiting for the organisation decision and then :

- Land near by,
- or stay in the air, close to the accident for a better localisation.
- or go on with the task.

The radio contact with the organisation is impossible :

- Throw a flare.
- If there is another pilot near by, or in radio contact with you ask him to contact the organisation landing near a telephone, stay at the maximum in contact with the pilot in order to give him information about the rescue action progression.
- If you are alone, you have to judge according to the area, the impact, the presumed state of the pilot, if you should better land near by him or near by a telephone.

Further information to give to organisation on reaching the injured pilot :

- Accessibility of the injured, distance of the 1st road, trees, slope, cliffs,...
- State of the injured pilot :
  - conscious/unconscious,
  - pulse, breathing,
  - mobility,
  - opened fracture/ closed fracture,
  - internal/external haemorrhage.

Protect & rescue the injured pilot :

- Avoid injuring yourself, land only if you can do so in total security
- Approach calmly to the injured pilot. If possible approach from the side or from below in order to avoid falling stones.
- Secure the zone.
- Once discovered by the rescue action, prepare for the access of the helicopter (fold up the gliders)
- Protect the injured :
  - Do not move him.
  - Cover him if he is cold.
  - Speak to him even if he is unconscious.
  - Find out if his vital functions (pulse, breathing) are efficient and

do not intervene if you are not competent.
- If you have no choice, intervene medically mouth to mouth/
heart massage (1 for 5)

Annex 13

CIVL Jury & Steward Incident Policy

This policy provides guidelines for censoring the conduct of com petition participants with respect to their behaviour towards CIVL representatives at CIVL sanctioned meets.

These participants are competitors, team leaders and ground crew. The CIVL representatives are Stewards, Jury members or Technical directors. In addition other meet officials may be considered CIVL representatives under this policy.

In general, practical rulings and other decisions adversely affect the scores of one or more pilots . These pilots, their time leaders or team members may be angered by these decisions.

It is reasonable to expect argument and disagreement on the part of these individuals but abusive language and excessively load delivery are not acceptable

In addition physical abuse / threats / (hitting, kicking or spitting) is totally intolerable.

The following guidelines are provided for such abusive behaviour.

Procedure

A full report of the incident should be delivered to the CIVL bureau as soon as possible after the event. The report should be accomplished by the names and addresses of witnesses if any . The bureau or a specially appointed committee will review this report make enquiries and when necessary then choose a procedure from the following options

Lesser offences

These offences consist of excessively abusive language or hitting an official with an object not causing physical damage (liquids, paper, dirt etc.)

Punishment (in order of severity)

1. The offending individual and his/her Aero club receives a letter of reprimand from the CIVL
2. The offending individual is required to send a letter of apology to the offended official before he. she is allowed to participate in another CIVL sanctioned event.

Serious offences

These offences include hitting an official with fists feet or there body parts as well as hitting with solid objects (sticks, socks etc.)
or otherwise causing bodily abuse (tripping pushing etc.)

Punishment (in order of severity)
Note . the punishments in the lessor offences may be invoked as well as the following .

1. The offending individual may get a point reduction from his or her score. If the offender is a team leader, the point reduction may be for the entire teas overall score.
2. The offending individual may be banned from CIVL sanctioned events for a specific period of time including forever.

Meet director has the power to immediately ban . disqualify a pilot for physical attack on any official

Abusive behaviour is considered un-sportsman like conduct and should be treated as such. Like wise abusive behaviour on the part of CIVL official is considered un- professional conduct and will be dealt with a similar manner as the above.

Punishment will be elimination of the official from the roster of acceptable Steward, Jury or Technical Directors.

Annex 14

DRAFT 11/99
DENNIS PAGEN

GUIDELINES FOR CLASS II DETERMINATION

These guidelines are intended to provide procedures for manufacturers and the CIVL classification technical committee (hereafter referred to the *committee*).

BACKGROUND: The definition of a Class 2 hang glider includes the requirement that it be capable of being foot launched and landed consistently in nil wind (Refer to Section 7, 1.4.2). The reason for this requirement is to preserve the light weight and simple nature of the class. Weight is the ultimate factor limiting performance, so this requirement helps create a level playing field while allowing reasonable design development. In order for a glider to be classified as class 2 by the committee it must be observed to be launched and landed repeatedly in nil wind. Hang Gliders with aerodynamic controls that cannot pass this requirement are class 4 gliders.

MANUFACTURER PROCEDURES

Manufacturers with a design intended to be a class 2 glider that they wish to enter into a CIVL sanctioned competition should contact the CIVL committee. The committee will either accept a videotape demonstrating the required takeoffs and landings or the manufacturer may choose to demonstrate the procedure for a committee member or appointee. Evidence submitted solely by videotape will be ruled upon only at the CIVL annual spring meeting when the committee convenes. Evidence from a committee member witness or an appointed witness will be reviewed in a timely fashion. When it is submitted, it is suggested that two weeks be allowed for proper review.

A – VIDEOTAPE REQUIREMENTS – Videotape submitted as the sole proof of nil wind capabilities (i.e., there is no official committee witness) must include the following:

1. A continuous film of each flight including takeoff and landing shot from the landing area. A total of three flights in a row demonstrating safe takeoffs and landings must be shown. Both takeoffs and landings must be clearly visible on the videotape. Note: the use of flaps is allowed at any point in the flight.

2. The slope of the takeoff must be shown by filming the slope perpendicular to the fall line with the horizon or a visible level as reference. A normal lens setting should be used for at least part of the shooting.

3. The wind streamers near the takeoff and near the landing must be clearly shown in the same continuous video as the takeoff and landing. It is suggested that the cameraman zoom in or walk to the streamer while filming.

4. Still photos of three landings with a date and time stamp (databack camera) must be submitted along with the videotape as evidence that the flights occurred successively within a reasonable time period.

FURTHER REQUIREMENTS

5. The minimum height of the glider above the ground at some point in the flight must be one wingspan. We suggest using a training hill for ease of filming.

6. The maximum steepness of the launch point is 30º.

7. A light material strip such as Nylon or surveyor's tape or lengths of yarn must be used as streamer material to indicate nil wind (see Section 7, 1.4.2). The streamer material must be free from the staff, which can be accomplished by slanting the staff. By definition, slight stirring of the streamer is allowed. We suggest lifting and dropping the streamer to prove it hasn't been artificially stiffened.

8. All three flights must take place within a 4 -hour period.

9. Takeoffs and landings, to be successful, must occur solely on the pilot's feet with no part of the glider touching the ground except a wing tip and/or the rear end of the keel (or tail if so equipped).

10. If only videotape is submitted, it must include a video of the weighing process of the glider showing the scale reading and the unsupported glider. The weighing process must take place immediately after the last flight.

11. The manufacturer must submit an affidavit stating the maximum weight of the glider to be used in competition. In addition the wing dimensions including span, root chord, tip chord (measured at the most outboard point where both the trailing edge and leading edge are straight) and area. New editions of a design which change wing loading must be reexamined.

12. The minimum temperature allowed for performing the flying tests is 10ºC (50ºF).

B – WITNESS REQUIREMENTS

1. If a committee member witness is used, no videotape is necessary, but a written report describing the takeoffs and landings as being successful and successive (three in a row) must be made by the witness. This report must include the takeoff slope angle and the wind observed. Accompanying videotape is desirable. The manufacturer is responsible for all expenses of the witness, including travel, lodging and food. Note: this procedure can take place at any agreed upon site.

2. If an appointed witness is used, a written report must be made *and* a videotape fulfilling the requirements of A must be submitted. Note: the advantage of this procedure is that it can take place anytime suitable arrangements can be made for an appointed witness to be present.

C – COMMITTEE RESPONSIBILITIES – The committee will meet at the CIVL plenary meeting and rule on any outstanding requests. The committee will rule on witnessed submissions between plenary sessions in a timely fashion. At least one member must view submitted videotape or the flights in this case. The committee will maintain a current list of accepted class 2 gliders on the CIVL web site.

Special Note: Wheels are allowed on class 2 gliders in competition. However, all launches other than tow launches must be performed on foot (see special rules for disabled pilots, Section 7, 1.4.3.2).

CURRENT LIST OF ACCEPTED CLASS 2 GLIDERS:

1. Flight Design Exxtacy
2. Flight Design Ghostbuster
3. Guggamos E-7
4. Icaro Atos
5. Tecma Ixbo

Annex 15

Rules for flight verification

Competition flights can be verified using either photographic evidence or GPS track-log evidence (or both). Where GPS flight verification is to be used, the competition organization must advertise beforehand what approved software will be used and the types of GPS instruments that will be supported. The organiser may charge pilots for any films and film development used during the competition but the policy regarding film costs and procedures must be advertised before the start of the competition.

Any system of GPS flight verification must first be approved by the relevant sub committee of the CIVL as being secure and suitable for the purpose of verifying competition flights.

A pilot may use multiple cameras or GPSs for verification and backup and may submit multiple films and/or track-logs to the scorer. The evidence will be chosen so that the pilot's best possible score will be taken for flight verification.

The verification means must show any start points and turn points claimed in the order specified on the day board, and some evidence of landing location.

The standard rules for photographic flight verification apply when photos are being used as evidence of flight, except that if photos are being used as backup to a GPS track log, only the day board and pilot identification is required on the film prior to the point where a particular feature is required. This means that if the GPS is functioning correctly, no photos (except day board and pilot identification) are required, until there is a problem with the GPS, upon which photos can then be used to complete the evidence of the flight.

GPS use

Pilots must ensure they are using a GPS that is compatible with the flight verification software that is being used. The makes and models that will be accepted for flight verification during a competition will be publicised prior to the start of the competition.

Competition organisers must only use flight verification software that has been evaluated by the relevant sub committee of the CIVL as being suitable and secure. The organiser must publish, as part of routine pilot notification, the name and version number of the flight verification software prior to the start of the competition.

Pilots must lodge the make, model and serial number of all GPS devices that they intend to use during the competition with the competition scorer. If the device a pilot nominated is damaged during the competition the pilot may wish to use an alternative device. The competition organiser or launch marshal must be given the make, model and serial number of this alternative device prior to a pilot launching to fly a round for which the pilot hopes to use the device's track-log for verification.

The competition director must ensure that each pilot has a unique make, model and serial number combination (i.e. no pilots are sharing devices) and they or their assistants must check the device's make, model and serial number prior to every task verification. Any GPS submitted which does not match the lodged information will be rejected for verification.

Sectors

For GPS verification all sectors may have extra regions of radius 100m added to the standard FAI sector. Sectors which represent the start of timing must be in line with the next leg of travel (even if there is a turn point prior to

the start point). This is to prevent a portion of the start sector being closer to the next turn point or goal than the start point itself.

Start, Goal or turn point verification

The pilot must provide an unambiguous track log that shows without doubt that the data was collected:

- By the pilot of the hang glider on the flight in question.
- Of the declared turn point feature from the correct location in the correct sequence.
- Between the takeoff and landing.
- With all relevant information being present on the track log.

The track log must show for any start, goal or turn point that is claimed for the flight, one of the following :

- A point within the normal FAI sector for plus the allowable sector additions for possible GPS error.
- A pair of points or a point and a way-point not more than 60 seconds apart for which a straight line drawn from the first point to the second point passes through the allowable sector.

Where the point being claimed is a start point (and the task allows the pilot to choose their start time) and the track-log has 2 points either side of the start or goal line at most 60 seconds apart, then the start or end time is then interpolated from these points (constant speed being assumed). Otherwise a start time is taken from the last (in time) point within sector of the start point.
Because some pilots may be relying on photographic flight evidence, the goal will be manned and timed in the normal fashion. If the GPS time is to be used, the same timing rules apply as for a start except that the competition organiser has the option of using the time determined by the extrapolation of the speed from the previous pair of track points before the goal.

General verification rules

If an error is identified in the coordinates supplied by the competition organizer, and there is a difference between the coordinates of the named feature and the supplied coordinates, the correct coordinates will be found and then either the named feature or the supplied coordinates can be used for flight verification.
The track-log must contain on average at least 1 point for every five minutes of on course flying time (points taken prior to the start and after goal are not counted). e.g. a 2 hour flight must contain at least 24 track-log points between the start (launch or start point) and goal or the end of the flight.
If goal is not achieved, the end of flight may be taken as to be the point within the track-log closest to the next target (not achieved), or if the task is an open distance, the end of flight will be the point within the track-log that gives the pilot his/her best position according to the type of open distance being used. The time of the track log point chosen as the finish of the flight must be consistent with the flight being claimed.
The verification software will confirm that all points used to verify the flight occurred at reasonable times (e.g. on the day in question, between the start of the task and the end of the task, and showing the correct chronology of start and turn points).
The competition organiser has the discretion to reject any track-log, or part thereof, if she/he feels it does not show sufficient evidence that the claimed data is genuine.
If a task is cancelled, the pilots will still be scored up to the point in time when the day was cancelled. The pilots may submit their track logs to claim their finish of the flight as being the last valid track point prior to the cancellation of the task, or their best position on course prior to the cancellation of the task. No other means of flight verification will be accepted if the task is cancelled. Pilots who do not present a valid track log will in this case be given a landing score according to an agreed procedure, but aerial photographs claiming a position over the ground will not be accepted. Pilots without a valid GPS track will be at a disadvantage.
The pilot must ensure that he/she has equipment that is secure and compatible with the approved GPS flight verification software that is in use.
Pilots will be required to correctly set up the operating parameters of their GPS instruments. Failure to correctly set up their GPS instruments may lead to penalties being applied.

Annex 16

DRAFT by CILV safety and training cubcommittee

Dezember 14, 1999

HANG GLIDING SAFETY STANDARDS FOR CIVL SANCTIONED EVENTS

I – PURPOSE

The purpose of these standards is to insure a certain minimum level of structural integrity, pitch stability and passive safety in modern Class I hang gliders.

II - STRUCTURAL LIMITS

1. Minimum diameter of steel portion of bottom side structural cables is 1.9 mm or 5/64 inches. If 1 x 19 cable is used, 2 Nico press fittings applied with LOCTITE must be used (according to Nico press manufacturer's specifications). Minimum breaking strength of side cables must be 340 kg (750 lbs). Rear lower cables must be plastic coated to avoid cutting the pilot during crash landings.

2. If front to rear cables are placed part way up the uprights gliders have to be certified in this configuration in order to fly in sanctioned meets.

3. If during the meet uprights are replaced which are not included in the original certification they should have documentation showing that they are as strong in bending and compression loads as the originals and no stronger than 125% of the originals.

4. Only speedbars with integrated internal rigging cable can be used. A minimum tension load of 300 kg is required.

5. The pilot suspension must have a minimum breaking strength of 1800 kg (4000 lbs) which includes both the harness suspension straps and the glider attachment loop and carabiner. The attachment loop must have a backup and either the main or backup must be non-metallic.

6. A helmet must be worn that contains a hard shell and a minimum of 2.5 cm or 1 inch of appropriate anti-shock ABS foam.

7. A reserve parachute easily reached by both the pilot's hands is mandatory.

III – STABILITY LIMITS

A The glider's batten profile must comply with the published batten pattern to remain within 1 cm of the pertinent line. The published batten pattern is that to be submitted with the glider during certification. Alternate batten patterns may be submitted for gliders declared "prototype" (see below).

B The glider's washout (twist) limiting devices must be set within the manufacturer's tolerances as published in the certification package. The method to test the pitch stability devices is the standard method such as a string from one side to the other to compare the height above a keel reference point. A tolerance of 2.5 cm (1 inch) should be allowed. It is suggested that DHV, HGMA and BHPA agree on a minimum setting below the certified setting.

IV - PROTOTYPES

Gliders declared prototypes may be used provided:

A They have been pitch tested by the manufacturer and are accompanied by a published pitch curve at 32 km/h and 48 km/h and published washout limiting device limits.

B Prototype gliders must comply with the Structural Standards unless they have a variance approval from the CIVL Classification Technical Committee.

V - METHODS

At Category I events the Technical Compliance Committee consisting of the Meet Steward assisted by Jury members or other selected individuals will test the first 3 gliders at goal before the pilots derig their gliders. Other gliders will be tested at random. Pilots are required to assist in the process when necessary.

A Batten compliance will be performed by comparing battens to the manufacturer's published pattern.

B Washout device measurement will be performed according to the manufacturer's published method.

Manufacturers and competitors are responsible for providing the published methods, limits and patterns to the meet's Technical Compliance Committee prior to the beginning of the competition. (see Technical Compliance bulletin)

VI - PENALTIES

The normal penalty for lack of glider compliance is a zero for the last round flown. At the discretion of the Meet Steward a lesser penalty may be applied in rare cases due to extenuating circumstances.

Draft 5

PROPOSED PROCEDURE TO CONTROL PILOT QUALIFICATION FOR THE CATEGORY 1 EVENTS IN 2000

This is to implement the Section 7 rule 5.11.1 that requires for a pilot to have ranked within the best 2/3 of a FAI category 2 event during the last 3 years :

CIVL will accept qualification in classes other than those the pilot wishes to enter. Exception will be permitted for Women's Hang Gliding for which the previous cross-country flight requirements will continue to be accepted.

For the year 2000 the previous world championships will be considered as category 2 events. The following events will be considered

- World 1997, Euro 1998, World 1999 including Bramberg meet.
- All the category 2 events : From the 1st of June 1997 to 1st of June 2000 will be considered provided the results are given in time to Sarah Fenwick.

All the organisers must submit to Sarah Fenwick the list of the pilots wishing to compete, since she is going to be responsible for this control.
The Entry form must indicate the previous ranking to one of these events.

As for the year 2001 WAG
The pilots having competed in Continental Championships during 2000 will be accepted whatever rank they get in these events.
All the category 2 events will be considered from the 1st June 1998 to the 1st June 2001 including Euros 1998, Monte Cucco 99 and Bramberg 99.

O Burghelle Nov 1999