



FAI Sporting Code

*Fédération
Aéronautique
Internationale*

Annex A to Section 3 – Gliding

RULES FOR WORLD AND CONTINENTAL SOARING CHAMPIONSHIPS

CLASS D (Gliders) Including Class DM (Motor Gliders)

2006 Edition

This Edition is valid from 1 October 2006 until 30. September 2010

Avenue Mon-Repos 24
CH-1005 Lausanne
(Switzerland)
Tél.: +41(0) 21/345.10.70
Fax: +41(0) 21/345.10.77
E-mail: sec@fai.org
Web: www.fai.org

Passed by IGC meeting in Lausanne, Switzerland, March 2006
and
IGC Bureau meeting in Cambridge, UK, September 2006

FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE

Avenue Mon Repos 24
CH 1005 - Lausanne
Switzerland

<http://www.fai.org>
e-mail: *sec@fai.org*

Copyright 2006

All rights reserved. Copyright in this document is owned by the Fédération Aéronautique Internationale (FAI). Any person acting on behalf of the FAI or one of its members is hereby authorised to copy, print, and distribute this document, subject to the following conditions:

1. The document may be used for information only and may not be exploited for commercial purposes.
2. Any copy of this document or portion thereof must include this copy-right notice.

Note that any product, process or technology described in the document may be the subject of other intellectual property rights reserved by the Fédération Aéronautique Internationale or other entities and is not licensed hereunder.

CONTENTS

<u>Para</u>	<u>Subject</u>	<u>Pg</u>	<u>Para</u>	<u>Subject</u>	<u>Pg</u>
PART 1	<u>GENERAL</u>	5	7.4	Starting	23
1.1	Objectives of the Championships	5	7.4.1	Definitions	23
1.2	General Requirements	5	7.4.2	Start Options	23
1.3	Championship Classes	5	7.4.3	Starting Procedures	23
1.4	Responsibilities of the Organisers	6	7.4.4	Validity of Starts	24
			7.4.5	Event Marker	24
PART 2	<u>CHAMPIONSHIP OFFICIALS</u>	7	7.4.6	New Starts	25
2.1	The Championships Director	7	7.4.7	Communication of Start Times	25
2.2	Stewards and Jury Members	7	7.5	Turn Points and Assigned Areas	25
2.2.1	Stewards	7	7.6	Outlanding	25
2.2.2	International Jury	8	7.6.1	Contest Area Boundary	25
			7.6.2	Real Outlandings	26
PART 3	<u>NATIONAL TEAMS</u>	9	7.6.3	Virtual Outlandings	26
3.1	Selection of Teams	9	7.6.4	Aero Tow Retrieves	26
3.2	Qualifications	9	7.7	Finishing	26
3.3	Team Captain's Responsibilities	9	7.7.1	Finish Options	26
3.4	Entry	10	7.7.2	Definitions	27
3.4.1	Application for Entry	10	7.7.3	Finish Procedures	27
3.4.2	Entry Fee	10	7.8	Landing	27
3.4.3	Pilots	10	7.9	Flight Documentation	28
3.4.4	Rejection of Entries	10			
3.5	Registration	11	PART 8	<u>SCORING AND PENALTIES</u>	29
3.6	Insurance	11	8.1	Scoring Systems	29
			8.2	Common Rules	29
PART 4	<u>TECHNICAL REQUIREMENTS</u>	12	8.2.1	Championship Day	29
4.1	Sailplanes and Equipment	12	8.2.2	Daily Scores	29
4.2	Aircraft Maximum Mass Limits	13	8.2.3	Finisher	29
4.3	Contest Numbers	14	8.2.4	Handicaps	29
			8.2.5	Penalties	30
PART 5	<u>GENERAL FLYING PROCEDURES</u>	15	8.2.6	Cumulative Scores	30
5.1	General	15	8.3	Definitions of Scoring Parameters	30
5.2	Briefing	15	8.3.1	Championship Days	31
5.3	External Aid to Competitors	15	8.3.2	Competitors	32
5.3.1	Radio Transmitters and Transceivers	15	8.4	1000-Points Scoring System	33
5.3.2	Other Types of Aid	15	8.4.1	Racing Tasks	33
5.4	Control Procedures	16	8.4.2	Speed Tasks	34
			8.4.3	Distance Tasks	34
PART 6	<u>TASKS</u>	17	8.5	Place Scoring System	35
6.1	Task Options	17	8.6	Simplified Scoring System	35
6.2	Task Definitions	17	8.7	Team Cup	36
6.2.1	Racing Task	17	8.8	Penalties and Disqualifications	36
6.2.2	Speed Task – Assigned Areas	17	8.9	List of Approved Penalties	37
6.2.3	Distance Task – Assigned Areas	17			
6.3	Explanations of Tasks	18	PART 9	<u>COMPLAINTS AND PROTESTS</u>	38
6.3.1	Racing Task	18	9.1	Complaints	38
6.3.2	Speed Task – Assigned Areas	18	9.2	Protests	39
6.3.3	Distance Task – Assigned Areas	19	9.3	Treatment of Protests	39
			9.4	Appeals	39
PART 7	<u>COMPETITION PROCEDURES</u>	21			
7.1	The Launch Grid	21	PART 10	<u>RESULTS AND PRIZEGIVING</u>	40
7.2	Launching	21	10.1	Results	40
7.2.1	Definitions	21	10.2	Prizegiving	40
7.2.2	Contest Site Boundaries	21			
7.2.3	Launching Period	21	PART 11	<u>LOCAL PROCEDURES</u>	41
7.2.4	Suspending Launching	21	APP. 1	Configuration Checks for the PW5	44
7.3	Launching Procedures	22	APP. 2	Sporting Code Review and Change Process	47
7.3.1	Number of Launches	22	APP. 3	IGC Handicap List	49
7.3.2	Motor Gliders	22			
7.3.3	Release Areas	22			

PRELIMINARY REMARKS

- a) The Local Procedures describe operational procedures relevant to the site and complement these Rules.
- b) In this Annex the words "must", "shall", and "may not" indicate mandatory requirements; "should" indicates a recommendation; "may" indicates what is permitted; and "will" indicates what is going to happen.
- c) In this document, wherever the word he, his or him is used, it should be taken as he/she, his/hers or him/her.
- d) The numbering format of the Sporting Code General Section has been used in the layout of these Rules.
- e) Explanatory text and notes are included as unnumbered paragraphs in *italic Arial 10 font*.
- f) In this document, wherever the word pilot,entry, champion or participant is used, it should be taken as crew,team-entry, champions or team , with reference to the 20m 2-seater class.

Bar in the right hand margin marks all text changes.

PART 1 GENERAL

1.1 OBJECTIVES OF THE CHAMPIONSHIPS The objectives are to:

- a. Select the champion in each competition class on the basis of the pilot's performance in the tasks set;
- b. Foster friendship, co-operation and exchange of information among soaring pilots of all nations;
- c. Promote worldwide expansion of the public image of soaring;
- d. Encourage technical and operational development of the sport;
- e. Encourage the development of safe operational procedures, good sportsmanship, and fairness in the sport of soaring.

The Organisers may state any additional objectives in their Local Procedures.

1.2 GENERAL REQUIREMENTS

1.2.1 The Championships shall be controlled in accordance with the FAI Sporting Code, General Section and Section 3 (Gliders & Motor Gliders), and specifically with Chapter 7 of Section 3 and with this document, which is approved by the IGC plenary and which constitutes Annex A to Section 3. Any competitor or Team Captain violating or tolerating the violation of these rules shall be suspended or disqualified from the Championships.

1.2.2 The winner is the pilot having the highest total score, obtained by adding the pilot's points for each championship day. In case of a tie, see paragraph 10.2.3. The winner will be awarded the title of World Champion, provided that there have been at least four championship days (see 8.2.1) in that class.

Final places, for all tied results, should also be determined by the procedure stated in 10.2.3.

1.2.3 The total period of the event shall not exceed 16 days including two days on which the Opening and the Closing Ceremonies are held. Events should be separated by a minimum period of 4 days. At least one non-flying rest day shall be given during the period. An official practice period of about seven days immediately preceding the opening of the Championships shall be made available to all competitors.

The Organisers may declare further rest days for stated reasons such as pilot fatigue. A rest day is a day declared a rest day in advance by the organisers or a day declared a rest day at first briefing.

1.2.4 The official language of the Championships shall be the English language; this shall include all regulations and information circulated to the competitors, any public announcements during the event, and briefings.

The language of the Organisers and additional languages may be used at their discretion.

1.3 CHAMPIONSHIP CLASSES

1.3.1 The Championships shall consist of the one or more classes as described in the main body of Section 3 of the Sporting Code, Chapter 7, and as listed in the Local Procedures.

1.3.2 If any one class does not have at least ten participants from at least five NACs on the first Championship day, the contest shall take place but no Champion will be declared.

1.3.3 Motorised sailplanes shall be permitted to participate in their appropriate classes, provided they have fully functioning MoP recorders.

1.4 RESPONSIBILITIES OF THE ORGANISERS

1.4.1 The Organisers shall pay due regard to safety and fairness in all aspects of the championships.

The Organisers may issue additional rules regarding safety in the Local Procedures.

1.4.2 The Organisers shall provide:

- a. All facilities necessary for the satisfactory operation of the Championships.
- b. Each competitor and Team Captain with all complementary information upon arrival at the contest site, including a large scale map section showing each of the start, turn and control points, and an electronic version of the start, turn point and control point data base in the IGC standard file format for turn point data files.
- c. Full meteorological information during the Championships, access to which shall be available to competitors and assistants in addition to briefing material supplied to the competitors.

The meteorological, GNSS and other flight data from a Championship are the property of the Organisers and should be distributed freely.

The Organisers should provide a copy of the stand-alone Local Procedures document to each Team Captain.

1.4.3 The Organisers shall perform doping controls in accordance with FAI Rules and National requirements as stated in the Local Procedures.

1.4.4 The Organisers shall form a Safety Committee consisting of at least one of the event Stewards and one pilot from each competing class. The representative pilots shall be selected by vote by the other pilots in the class.

The role of the Safety Committee is to receive and investigate complaints regarding poor airmanship. The Committee has no powers of discipline but may censure a pilot and is required to advise the Organisers if a pilot repeatedly offends against sound airmanship.

1.4.5 The Organisers must pay sanction fees to FAI as decided by IGC.

1.4.6 The travel and living expenses for the Jury President and Chief Steward are the responsibility of IGC.

1.4.7 The travel and living expenses for the Jury Members and Stewards are the responsibility of the Organisers.

Other arrangements may be agreed upon with the individual Official.

PART 2 CHAMPIONSHIP OFFICIALS

2.1 THE CHAMPIONSHIPS DIRECTOR

- 2.1.1 The Championship Director shall be in overall operational charge of the Championships and be approved by the IGC. He shall have a Deputy Director and Technical Officials to assist him. The Championship Director is responsible for good management and the smooth and safe running of the Championships.
- a. He shall make operational decisions in accordance with the rules of the Sporting Code and of the Championships. The decisions shall be published without delay in writing on the Official Information Board in the Briefing Hangar.
 - b. He may penalise or disqualify a competitor for misconduct or infringement of the rules.
 - c. He shall give evidence to the International Jury if requested.
 - d. He shall publish the officially accepted entry list, issue daily results with the minimum of delay, and report the full results to his NAC and to FAI.
- 2.1.2 The Director or his named deputy shall be available at the contest site at all times while Championships flying is in progress.

2.2 STEWARDS AND JURY MEMBERS Stewards and Jury Members may not be competitors, nor hold any operational position in the organisation.

The Stewards and Jury Members must understand and speak English and possess a thorough knowledge of: the FAI Sporting Code, General Section and Section 3; the FAI International Jury Members Handbook, and, Rules and Local Procedures for the Championships.

- 2.2.1 **Stewards** The IGC-Bureau shall nominate a Chief Steward, at least one year prior to the event, plus at least one other Steward, of nationalities different to that of the Organisers, except that in the event of a last minute failure to attend, a replacement Steward of any nationality and acceptable to the other Stewards may be invited.

- a. The nominations shall be approved by IGC.
- b. One Steward shall be present at the contest site throughout all major operational activities including during the official practice period.

The primary responsibility of the Chief Steward is to ensure the timely completion of all organisational aspects of the competition.

The role of the Stewards is to provide advice and/or support to the Director, the International Jury, the Team Captains and the competitors. Stewards must have extensive experience of soaring competitions and conduct themselves in accordance with the guidance provided in the IGC Steward Handbook.

2.2.2 **International Jury**

- a. A nominated Jury shall consist of the President of the Jury plus two Members. The President shall be appointed by the IGC. Both Members shall normally be appointed by the IGC, except that, in exceptional circumstances, the President may be empowered to appoint one Member, in consultation with the President of the IGC, from amongst persons present at an event. One or both members may be absent from the event provided:
 - (i) They are able to attend at the event site as required by the Jury President to hear a protest, and
 - (ii) They are present at the event site for the final day of competition to hear any protests arising from the last day of competition, and to attend the final Jury Meeting to confirm the results.
- b. In addition to being the Chairman at Jury meetings, the President and has the right to require the Organisers to abide by the FAI Sporting Code and the published Rules and Procedures for the Championships. If the Organisers fail to do so the President of the Jury has the power to stop the Championships until a Jury meeting has considered the situation.
- c. The Jury has the right to terminate the Championships if the Organisers fail to abide by the FAI Sporting Code and the published Rules and Procedures. They may recommend to the FAI Secretary General that all entry fees be returned.
- d. **Meetings of the International Jury**
 - (i) Attendance at Jury meetings is compulsory for Jury members, except for special reasons such as illness or emergencies. In such cases the Jury President may accept an eligible replacement nominated by the Jury member concerned.
 - (ii) Jury meetings are to be conducted in accordance with the FAI International Jury Members Handbook.
 - (iii) Decisions by the Jury shall be reached by simple majority. The President of the Jury shall report the details of any protest to FAI.
- e. **Dissolution of the International Jury** The Jury shall only cease its functions after it has given its decision on all protests that have been correctly made. If no protests are outstanding it shall not cease its functions until the time limit set for the receipt of protests following the last task. The last action of the Jury is to approve the competition results of the Championships and declare the Championships valid, providing they have been conducted in accordance with the rules and the decisions of the Jury.

The International Jury deals with protests made by competitors. The Jury Members must strive to be neutral and independent of the Championships Director's decisions but be prepared to give advice and answer queries regarding interpretation of the rules and the general running of the event if raised by officials of the event.

PART 3 NATIONAL TEAMS

3.1 SELECTION OF TEAMS Each NAC shall select its own Team Captain, competitors, and assistants. The NACs shall certify to the Organisers (normally in the entry form) that the team members qualify under these rules.

3.1.1 The Team Captain, competitors and crew members, by virtue of entering, agree to be bound by these Rules and the Local Procedures issued for the Championship, by any rulings and requirements stated by the Organizers at any briefings, and the airspace regulations in force during the Championships. They are also deemed to accept, without reservation, any consequences resulting from the event (for instance see 3.6 on insurance).

3.2 QUALIFICATIONS A competitor must be a citizen or resident of the country of the entering NAC and satisfy the conditions of the FAI Sporting Code, General Section 3.7 on citizenship and representation, and must;

- a. Hold a gold badge, or, hold a silver badge and have competed in at least two National Championships;
- b. Have flown at least 250 hours as a pilot in command, of which at least 100 hours must be in sailplanes;
- c. Hold an FAI Sporting Licence with a current FAI stamp;
- d. Hold a Pilot Licence or equivalent document issued or endorsed by the authorities of the country in which the sailplane is registered, or of the country where the Championships take place;
- e. Know, understand, and abide by the FAI Sporting Codes and the Rules and Procedures issued for the event.

A Team Captain:

- *Should be of the nationality of his NAC but a substitute of another nationality, holding written authority from the NAC concerned, may be accepted at the discretion of the Organisers.*
- *May be a competitor or assistant but preferably be additional to them.*

An Assistant may be of any nationality.

3.3 TEAM CAPTAIN'S RESPONSIBILITIES The Team Captain represents his NAC and is the liaison between the Organisers and his team members. A Team Captain not fulfilling his responsibilities, as detailed in this Section, may be suspended or disqualified in accordance with paragraph 1.2.1. The Team Captain:

- a. Should endeavour to ensure the proper conduct of his team members and that the pilots do not fly if ill or under the influence of alcohol or drugs, or suffering from any disability that might endanger the pilot or others.
- b. Is responsible for compliance by his team members with the terms of the Certificate of Airworthiness or Permit to Fly of the competing sailplanes and, where appropriate, with the laws of his own and those of the Organisers' country.
- c. Is responsible for ensuring that all members of his team receive and understand all information given at any Championships briefing.

3.4 ENTRY

- 3.4.1 **Application for Entry** Application for entry shall be accepted only on the official entry form, and accompanied by the entry fee in full. Incomplete entry forms or those containing inaccurate information will not be accepted.

After four months before the opening day applications may be accepted, only if there are vacancies, at the discretion of the Organisers. Exceptions may be made for applications from the opposite hemisphere.

- 3.4.2 **Entry Fee** The entry fee shall cover all operational costs during the Championships, except that aero tows may be paid as used, at the discretion of the Organisers.

- a. Entry fees shall be returned:
 - (i) In full, if the Championships do not take place,
 - (ii) Unused fees shall be paid back if the Championships are stopped or cancelled for reason of force majeure,
- b. A competitor who withdraws shall have no right to the return of any fees.

3.4.3 **Pilots**

- a. In Championships with more than one class, each NAC may enter the number of pilots approved by the IGC and specified in the Local Procedures, but not more than two pilots plus one substitute pilot in any class. A substitute pilot may replace a nominated pilot in the event of a withdrawal.
- b. Pilot changeover from one class to another shall not be permitted later than two months before the Opening Day.
- c. Any number of entries is allowed if evidence is provided that the conditions and Local Procedures make it safe to do so (as per section 1.4.1). with a strict maximum of 50 entries per class. If the number of entries per class exceeds the maximum of 50, the allocation of starting rights for the 2nd. Pilot per NAC(or 3rd Pilot at Junior or Women Championships) , has to be made according to the Country Ranking of the IGC Ranking list, valid at the closure date for Final Entries for the relevant Championship.
- d. The current Champion may compete as an additional member of their team.
- e. Two-seater Open Class sailplanes may compete either flown solo or dual. The crew member is considered to be variable ballast and can be changed on a daily basis. Only the nominated pilot in command shall be listed in the results.
- f. 20m – 2 - Seater sailplanes must compete flown dual. Both crew member must be on board all times and can not be changed, but the seat positions on board can be changed on a daily basis . Both pilots (the crew) in command shall be listed in the results. Both crew members on board the two-seater must fulfil the requirements for competitors in accordance with the FAI Sporting Code, General Section.

- 3.4.4 **Rejection of Entries** The organising NAC may not reject any entry to a Championship made in good faith and complying with the terms of entry.

3.5 REGISTRATION

- 3.5.1 On arrival at the contest site, each Team Captain and his competitors shall report to the Organisers' Registration Office to have their documents checked and to receive any supplementary information.
- 3.5.2 After the close of registration, no change of sailplanes or pilots shall be permitted. Pilots whose documents have not been checked and found to meet all requirements shall not be permitted to fly until the requirements are met.
- 3.5.3 The Organisers, if appropriate, shall require the following documents and translations:
- a. Documentary proof of insurance, or medical insurance cards.
 - b. For the pilot:
 - (i) Proof of nationality or certificate of residence (FAI General Section 3.7);
 - (ii) Valid Pilot Licence or equivalent document and proof of qualification regarding hours and badges; and
 - (iii) AI Sporting Licence valid for the year of the event.
 - (iv) A Therapeutic Use Exemption (TUE)
If, due to health problems, you are taking any medicines that are on WADA's prohibited list you should obtain a Therapeutic Use Exemption(TUE). You should contact your NAC to get information on how to obtain a National TUE. A national TUE is automatically recognized by FAI. Put the TUE in a sealed envelope and hand it to the Event staff upon arrival. This is extremely important in case of doping testing
 - c. For the sailplane:
 - (i) Valid Certificate of Airworthiness or Permit to Fly; and
 - (ii) Third party insurance certificate for the sailplane.
- 3.5.4 The Organisers shall state in the Local Procedures:
- a. If additional documents are required, and
 - b. Which documents shall be carried on board the sailplane.

3.6 INSURANCE

- 3.6.1 Third party insurance, as specified in the Local Procedures, is the responsibility of the entering NAC.
- 3.6.2 Personal medical insurance is required for all team members, covering accidents and sickness, including any local hospital costs and the costs of transport back to the team member's home country.
- 3.6.3 Required insurance shall be available for purchase at the contest site.

PART 4 TECHNICAL REQUIREMENTS

4.1 SAILPLANES AND EQUIPMENT

4.1.1 The competitors shall provide sailplanes, trailers, retrieve cars, and other equipment, including GNSS Flight Recorders, radios, oxygen systems, parachutes, and survival equipment of a performance and standard suitable for the event.

- a. The airworthiness, safety and safe operation of competing sailplanes and any associated equipment and vehicles, as appropriate, shall be the responsibility of the competitors at all times.
- b. Each occupant of a competing sailplane shall use seat belt and shoulder harness and wear a serviceable parachute on each competition flight.

The Organisers may specify additional mandatory equipment if the conditions of their country so require.

4.1.2 Each competing sailplane shall be flown within the limitations of its Certificate of Airworthiness or Permit to Fly and:

- a. Must have been issued a valid Certificate of Airworthiness or Permit to Fly not excluding competitions.
- b. Shall be made available to the Organisers at least 72 hours before the briefing on the first championship day for an acceptance check in the configuration in which it will be flown. This configuration shall be kept unchanged during the whole competition. Exception: In Open Class it is allowed to change complete wing panels and/or winglets. No instruments permitting pilots to fly without visual reference to the ground may be carried on board, even if made unserviceable. The Organisers may specify instruments covered by this rule in their Local Procedures.

Configuration refers to the shape, and dimensions of the primary structure of the sailplane and includes movable controlling surfaces, landing gear, winglets, and wing tip extensions. The configuration is considered to be changed if the shape, or dimensions of the primary structure are altered, or, for a motor-glider, if either the engine installation or the propeller is modified. "Instruments" includes any portable devices which use a gyro or inertial platform or high precision GNSS positioning and/ or attitude sensing technology.

Any navigational equipment is permitted.

The Organisers will state in their Local Procedures if they require competing sailplanes to:

- *Be marked with high visibility markings to improve in-flight observability.*
- *Carry GNSS data transmitters to enable the public display of GNSS flight records during competition flights. Such a display will not begin before the start line is opened and the actual position of the sailplanes shall be displayed with a time delay of at least 15 minutes. This delay should be reduced to zero prior to the finish.*

4.1.3 Damage to a sailplane must be reported to the Organisers without delay. A damaged sailplane may be repaired. The following items may be replaced instead of being repaired: control surfaces; the complete horizontal stabiliser; airbrakes or flap surfaces; canopy; undercarriage gear and doors; propellers; non-structural fairings; and, wing tips and winglets but not the entire outer wing panels.

If the damage was no fault of the pilot, the whole sailplane or any part of it may be replaced with the consent of the director of the Championships. Landing damage is normally assumed to be the fault of the pilot.

-
- 4.1.4 A competitor involved in a collision in the air shall not continue the flight but land as soon as practicable. Both pilots will be scored as having landed at the position at which the collision occurred.
- 4.1.5 During the Championships, on days when tasks are set, sailplanes entered in the event may only be flown on Championship tasks, except that the Organisers, at their discretion, may permit a sailplane to be test flown.
- 4.1.6 The Organisers have the right to inspect a competing sailplane at any time during the Championship up to the Prize Giving.

4.2 AIRCRAFT MAXIMUM MASS LIMITS

4.2.1 The following sporting maximum take-off masses and limitations shall be enforced:

- a. Open Class – 850 kg, for all FAI Open Class Gliders
 - (i) Changes to the wing panels and winglets shall be permitted during a Championship
 - (ii) The mass limit and configuration changes shall remain in force until 30 september 2017

b. 18 M Class – 600 kg.

c. 15 M and Standard Classes – 525 kg.

d. Club Class – no water ballast permitted

The certificated maximum mass of non-lifting parts may not be exceeded under any circumstances. Any other form of ballast in the wings, replacing water, is not permitted.

MTOW without water = a.)Maximum certified mass of non-lifting parts + Weight of lifting parts (wings) without any form of ballast or b.)Maximum certified takeoff - weight without water according to Type certificate data sheet / TCDS.

e. World Class – 300 kg.

f. 20m-2-Seater Class – 750 kg.

g. Organisers may impose additional restrictions to the above maximum take-off masses to take into account any operational factors such as obstacles, airfield limits, runway and tow plane limitations, and prevailing weather.

The certificated maximum mass may not be exceeded under any circumstances.

4.2.2 Checking take-off mass shall normally be completed before the sailplanes reach the grid. Adding mass beyond the weighing point is prohibited.

The procedures for establishing the mass of the World Class glider are set out in Appendix 1 to this Annex. The Local Procedures shall give details of the procedures for checking the mass for all Classes.

4.3 CONTEST NUMBERS

4.3.1 The contest numbers, as validated by the Organisers, shall be displayed:

- a. On the underside of the right wing, approximately 2.5 m from the centreline of the sailplane with the top of the figures or letters towards the wing leading edge. The height of the letters or figures should be not less than 80% of the wing chord.
- b. On both sides of the tail fin and/or rudder. These must be at least 30 cm high.
- c. On the glider trailer and crew car.

4.3.2 Contest numbers shall consist of not more than three letters or figures or a combination of letters and figures in a plain block style with a single colour that contrasts strongly with the sailplane's background colour.

4.3.3 The Organisers may require competitors to modify contest numbers that they deem to be similar, confusing or not complying with this paragraph 4.3. Competitors not complying with the Organiser's requirements may be denied competition launches.

Contest numbers on the sailplane and vehicles not only assist the Organiser's and other competitors to identify the sailplane, but also enable the public and the media to identify the sailplane, the pilot, the crew and the country.

PART 5 GENERAL FLYING PROCEDURES

5.1 GENERAL Cloud flying and unauthorized aerobatics are prohibited. Any maneuvers hazardous to others shall be avoided and may be penalized and competitors shall avoid dropping water ballast in any manner likely to affect other competing sailplanes.

5.2 BRIEFING A briefing shall be held each morning, during the training and championship flying periods, at which full meteorological and operational information appropriate to the task of the day shall be given. This shall include units of measurement and times as appropriate if not already stated in the Local Procedures.

- a. All pilots shall attend briefing except that a competitor who is unable to attend, for reasons outside his control, shall be represented by his Team Captain.
- b. Flight and safety requirements given at briefing shall carry the status of Local Procedures.

All flight and safety requirements should be provided in writing for the Team Captains.

5.3 EXTERNAL AID TO COMPETITORS The following limitations are imposed so that the competition shall, as far as possible, be directly between the individual competitors, neither controlled nor helped by external aid.

5.3.1 Radio Transmitters and Transceivers Radios are for voice transmissions between team members and between them and the Organisers only.

- a. They may not be used to contact Air Traffic Services other than for obtaining permission from an airfield to land on it, unless the Organisers add specific requirements in the Local Procedures.
- b. Any other data transmission between competitors, or between them and the ground, except as required: (i) by the organisers; or (ii) for safety purpose or; (iii) for situational awareness information, is prohibited"
- c. Transmissions may only be made on frequencies prescribed by the Organisers.
- d. The Local Procedures shall designate common radio frequencies that shall always be used by competitors for flight safety.

A single frequency should be designated for the launch, start, finish, and landing. One frequency should be designated for each Class flying within a common task area.

To improve safety, competitors should maintain a listening watch on the designated frequencies, especially during the launch, prior to starting, while finishing and landing, and when thermalling with other sailplanes.

5.3.2 Other Types of Aid Leading, guiding, or help in finding lift by any non-competing aircraft is prohibited. Competing sailplanes abandoning their task or still airborne after cancellation of their task must land or return to the competition site without delay and may not lead, guide or help in any way competitors in other classes still flying their assigned task.

5.4 CONTROL PROCEDURES Flights shall be controlled by GNSS flight recorders (FR).

- a. All GNSS FR's approved by the IGC up to two months prior to the Opening Day shall be accepted. A valid calibration certificate must be provided for each FR.

The FAI SC Section 3 requires that Flight Recorders have been calibrated within the previous 24 months.

- b. Two GNSS FRs may be used. One being designated to the Organisers as the primary recorder and the other one as a back-up.
- c. GNSS FRs recording intervals shall be set to 10 sec or less. Non-compliance may be penalised.
- d. FRs shall be switched on for at least two minutes before take off to establish an altitude baseline. On motor gliders having an MoP capable of being started in flight (including sustainer MoP) the engine must be started and run for a maximum of two minutes either before the launch, or as soon as possible after release if the motor glider is launched by aerotow. This is required to provide a positive record on the GNSS trace. The FR must remain switched on following an engine run on the ground.
- e. If both recorders fail and the flight record is interrupted for a period longer than one minute, then the glider shall be considered as having outlanded unless satisfactory evidence can be provided that the glider did not, during the interruption of the FR record, violate airspace or, in the case of a motor glider, use the MoP.
- f. The Organisers shall require the backup FR only in the event that the primary FR fails. The Organisers shall be informed of any change of equipment including the designation of the primary FR. Non-compliance may be penalised.

5.4.1 Penalties may be imposed by the Organisers for unauthorised interference with the GNSS equipment, data or internal program, or Tracking equipment.

PART 6 TASKS

6.1 TASK OPTIONS The Organisers shall set one of the following types of task each Day. They shall select at least two different types during a Championship, but none of them should be used for more than 67% of the Championship Days. The Tasks selected for the Championship shall be stated in the Local Procedures. The options are:

- **Racing Task**
- **Speed Task - Assigned Areas**
- **Distance Task - Assigned Areas**
- *The required percentage of Tasks applies to each Class.*

6.2 TASK DEFINITIONS

6.2.1 Racing Task The pilot has to fly around turn points, assigned by the Organisers, in the shortest time.

This is the "classic" task that has been used for years in all championships.

Finishers:

- *Are scored as a function of the speed and the task distance, and*
- *Will receive the same distance points and the same score for the same speed, even if the distance flown is different.*

Non-finishers:

- *Are scored only as a function of their achieved distance, and*
- *The distance points will be calculated relative to the maximum distance flown.*

6.2.2 Speed Task - Assigned Areas The pilot has to achieve the highest speed, in a designated (minimum), time around Assigned Areas.

Finishers:

- *Will receive the same distance points as the pilot flying the greatest distance, , and*
- *Will be scored as a function of the speed and the distance they achieved at the expiry of the designated time, and*
- *Will receive the same distance points and the same score for the same speed, even if the distance flown is different.*

Non-finishers:

- *Will be scored only as a function of the flown distance the same as for a racing task.*
- *The distance points for non-finishers will be calculated relative to the maximum distance achieved.*

Competitors speed and distance will be assessed as follows:

- *If the pilot flies longer than the designated time his speed will be the distance actually achieved divided by the time spent on task, or*
- *If the pilot flies shorter than the designated time his speed will be the distance achieved divided by the designated time.*

6.2.3 Distance Task - Assigned Areas The pilot has to achieve the greatest distance, during a designated (maximum) time, around Assigned Areas.

The pilot will be scored only as a function of the distance achieved at or before the expiry of the Designated Time (Time-out).

The Organisers may give an optional "penalty for outlanding" to non-finishers. This "penalty" is intended to encourage pilots to fly to the Goal, even after the expiry of the designated time. Any pilot reaching the Goal, even after Time-out, will be deemed to be a finisher. This will make it very unlikely that a pilot landing out will be able to beat a pilot who reaches the Goal.

6.2.4 Where possible the classes shall fly different tasks with turn points or assigned areas chosen to minimise any head-on conflicts on each leg and to avoid legs of

less than 50 km between Turn Points or the centre of any Assigned Areas. This minimum distance requirement shall not apply to the leg from the last Turn Point or control point to Goal.

6.3 EXPLANATIONS OF TASKS

6.3.1 Racing Task

- a. The Organisers shall set a number of Turn Points in a sequence.
- b. The competitor shall complete the task by passing through these Turn Points, in the sequence designated by the Organisers, and returning to the contest site in the shortest time.
- c. The Task Distance is the distance from the Start Point to the Goal via all assigned Turn Points. If start option (c) or (d) are used the start point which yields the greatest distance shall be used to assess the Task Distance.
- d. The score given to each competitor (in accordance with Part 8) shall take into account the Marking Distance and the Marking Speed defined as follows:
 - (i) The Marking Distance is the sum of the legs correctly completed by the competitor, commencing from the Start Point, in the proper order and the distance achieved on the next leg attempted but not completed, if any.
 - (ii) The achieved distance of the uncompleted leg is the length of that leg less the distance between the Outlanding Position and the next Turn Point, or Goal in the case of the last leg, with the provision that if the achieved distance of the uncompleted leg is less than zero, it shall be taken as zero.
 - (iii) The Marking Speed is the Marking Distance divided by the Time elapsed between the finisher's recorded Start Time and his Finish Time.

6.3.2 Speed Task - Assigned Areas

- a. The Organisers shall nominate a number of Assigned Areas (7.5.2) in a sequence, and set a designated task duration (Designated Time).

The following distances should be included in the task information for pilots:

- *The nominal Task Distance, assessed via the center of each Assigned Area, and*
- *The minimum and maximum Task Distance achievable via the Assigned Areas.*

The Assigned Areas should be large enough to allow the pilot the opportunity to adjust the length of their flight in order to avoid finishing before the Designated Time if their speed is higher than expected.

- b. The competitor shall complete the task by passing through these Assigned Areas, in the sequence designated by the Organisers, and returning to the contest site and achieve the highest speed in the Designated Time.
- c. The score given to each competitor (in accordance with Part 8) shall take into account the Marking Distance and the Marking Speed defined as follows:

-
- (i) If the competitor returns to the Goal after having visited all the Assigned Areas in the correct order, the Marking Distance is the distance from his actual Start Point, round all Assigned Areas, to the Goal.
 - (ii) If the competitor has outlanded on the last leg, the Marking Distance is the distance from the Start Point, round all Assigned Areas in the correct order, minus the distance from the Outlanding Position to the Goal, with the provision that if the achieved distance of the uncompleted leg is less than zero, it shall be taken as zero.
 - (iii) If the competitor has outlanded on any other leg, the Marking Distance is the distance from the Start Point, round all Assigned Areas in the correct order, to the point of the next Assigned Area which is nearest to the Outlanding Position, minus the distance from the Outlanding Position to this nearest point, with the provision that if the achieved distance of the uncompleted leg is less than zero, it shall be taken as zero.
 - (iv) The Marking Speed is equal to the Marking Distance, divided by the Time elapsed between the finisher's recorded Start Time and his Finish Time, or the task Designated Time, whatever is longer.

6.3.3 **Distance Task - Assigned Areas**

- a. The Organisers shall nominate a number of Assigned Areas (7.5.2) in a sequence, and set a designated task duration (Designated Time) .

The following distances should be included in the task information for pilots:

- The nominal Task Distance, assessed via the center of each Assigned Area, and
- The minimum and maximum Task Distance achievable via the Assigned Areas.

The Assigned Areas should be large enough to allow the pilot the opportunity to adjust the length of their flight in order to avoid finishing before the Designated Time if their speed is higher than expected.

- b. The competitor shall complete the task by passing through these Assigned Areas, in the sequence designated by the Organisers, and returning to the contest site and achieve the greatest distance before the expiry of the Designated Time.
- c. The Time-out Position is the last GNSS position before the expiry of the Designated Time . (see 7.6.3 for virtual outlandings).
- d. The score given to each competitor (in accordance with Part 8) shall take into account the Marking Distance defined as follows:
 - (i) If the competitor correctly crosses the finish line or finish ring before the expiry of the Designated Time, after having visited all the Assigned Areas in the correct order, the Marking Distance is the distance from his actual Start Point, round all Assigned Areas, to the Goal.

-
- (ii) If the Time-out Position is on the last leg, the Marking Distance is the distance from the Start Point, round all Assigned Areas, to the Goal minus the distance from the Time-out Position to the Goal, with the provision that if the achieved distance of the uncompleted leg is less than zero, it shall be taken as zero.
 - (iii) If the Time-out Position is on any other leg, the Marking Distance is the distance from the Start Point, round all Assigned Areas, to the point of the next Assigned Area which is nearest to the Time-out Position, minus the distance from the Time-out Position to this nearest point, with the provision that if the achieved distance of the uncompleted leg is less than zero, it shall be taken as zero.
 - (iv) In all cases, the Marking Distance is assessed by taking into account for each Assigned Area the valid fix recorded in the GNSS FR that yields the best overall Marking Distance.
 - (v) The Organisers may give a “penalty” to non-finishers by subtracting from the Marking Distance a fixed value of 20% of this distance plus half the distance between the competitor’s Outlanding Position and the Goal. This “penalty” shall not be applied if the pilot flies home after the time-out.

PART 7 COMPETITION PROCEDURES

7.1 THE LAUNCH GRID The classes shall be launched in separate groups. The complete grid order shall be drawn by lot before the first flying day.

- a. The grid order shall advance progressively by 2/7 of the number of sailplanes in each class; or by entire rows provided that there are approximately 2/7 of the sailplanes in each class allocated to each row, after each Championship Day.
- b. The grid order shall be published in the early morning. Sailplanes must be on the grid at the time specified by the Organisers.
- c. Only sailplanes on the grid at the time of the start of the launch shall affect the opening and/ or closing times of the start.
- d. The Organisers shall state in the Local Procedures whether water ballast may be discharged on the grid, and any required control of the discharge.

7.2 LAUNCHING

7.2.1 Definitions

- a. The Contest Site Boundary defines the geographical area, or areas, near the departure airfield and the start points, within which a competitor may land and be entitled to another launch.
- b. The Release Area is defined as a geographical area within which the glider must be released from the tow plane or the MoP must be shut down for a motor glider.

7.2.2 Contest Site Boundaries Contest site boundaries shall be designated by the Organisers and displayed on a map.

- a. The Organisers shall designate a re-landing area which shall be shown at briefing.
- b. A competitor landing outside the contest site boundaries after a regular launch shall not have any further competition launch on that day.

7.2.3 Launching Period The launching period shall be announced at briefing and given on the task sheet. The end of the launching period shall be before finishers are expected. If the Organisers delay the start of launching, other relevant times shall be delayed accordingly or the day cancelled.

The launch should be organised so that the time to launch the class is as short as possible. Competitors should not be refused a launch if they are ready to launch prior to the end of the launch period.

7.2.4 Suspending Launching

- a. Once launching has started, the Organisers may suspend towing if it is dangerous to continue. If the suspension is sufficiently long to give an unfair advantage to those already airborne, the Championship Director shall cancel the task.

-
- b. The Organisers may delay or cancel the opening of the start gate if they consider that the conditions are not suitable for the task to be flown safely. A task shall not be cancelled unless 7.2.4a. applies, or the weather deteriorates so that the task may not reasonably be attempted.

7.3 LAUNCHING PROCEDURES

7.3.1 **Number of Launches** Each sailplane is permitted a maximum of three launches per day.

- a. If a sailplane or pilot is not ready to be launched due to a fault by the Organisers, the launch in that group shall not be started.
- b. If a pilot postpones his first launch on his own initiative, or he is not ready when his turn comes up, he shall lose that launch.
- c. A competitor requiring a second or third launch shall be launched after the completion of the group launch in progress at the time the competitor is ready for such a launch.
- d. A failed take-off or a failure of the towplane resulting in jettisoning or premature release of a sailplane shall count as an official launch if the pilot elects to stay airborne. It shall not count as an official launch if the pilot lands immediately, even if outside the contest site boundaries, and reports to the launch point without delay.

7.3.2 **Motor Gliders** Motor gliders may self launch or launch by aero tow. The Organisers shall describe the launch procedures in the Local Procedures.

- a. If they self launch their MoP must be shut down in the designated release area below the maximum release altitude. Refer to 5.4d.
- b. If they require a second launch for a start, they must land prior to taking the new launch, otherwise they will be scored to the position at which they started their MoP.

7.3.3 **Release Areas** Towing patterns, release areas, and release height or altitude shall be given at Briefing.

- a. The release areas shall be separated by at least 5 Km and a release area shall only be used by one group at a time. A release area may be used by a subsequent group once the start gate for the initial group in that same area has opened.
- b. Pilots shall not release until after the tow pilot has rocked the wings of the towplane. Pull-ups before releasing are prohibited.

The Organisers may establish areas around the contest site within which continuous circling is prohibited or is permitted in one direction only. These areas must be stated in the Local Procedures.

- c. The Organisers shall ensure that the release areas and the release altitudes for launching are selected to enable competitors to land safely for a relaunch prior to the start, after allowing adequate time and altitude to search for lift after release, within the confines of the designated contest site boundaries.

7.4 STARTING

7.4.1 **Definitions**

- a. Start Point - is the center of the start ring, start line, assigned start point, or selected start point used by the competitor, as appropriate.

The first leg distance is assessed from the Start Point to first Turn Point or Assigned Area, except that, if option (a) - Start Ring is used, the first leg distance is from the center of the start ring to the first Turn Point or Assigned Area minus the radius of the start ring.

- b. Start Time - is the time the competitor leaves the start ring or start point, or crosses the start line, except that if Start Times are assigned, the Start Time shall be the assigned time.

- 7.4.2 **Start Options** The Organisers shall select one start procedure for every task, but not more than two during the competition, from the following options. The Start Options selected for the Championship shall be stated in the Local Procedures. The options are:

- a. **Start Ring** An area, formed by a circle around a start point, the defined radius being sufficient to encompass the departure airfield and all release areas.
- b. **Start Line**
 - (i) A straight line, of defined length, perpendicular to the track to the first Turn Point, or the center of first Assigned Area, or
 - (ii) An arc, of defined length, at a constant distance from the first Turn Point or the center of first Assigned Area.
- c. **Assigned Start Point** Multiple start areas, defined by circles of 0.5 km radius around each start point. Each pilot shall be allocated a specific start point each day.
- d. **Optional Start Point** Multiple groups of start areas, defined by circles of 0.5 Km radius around each start point. Each pilot shall be allocated one start group each day and shall select one of the start areas in this group.

Organisers may use Start Options a, c and d for all Tasks and Start Option b for Racing Tasks and Speed and Distance Tasks using Assigned Areas.

Organisers may only use Start Option b for Pilot Selected Speed and Distance Tasks if a mandatory first Turn Point is set.

- 7.4.3 **Starting Procedures** The start shall normally be opened 30 minutes after the take-off of the last sailplane in the class, which was in its specified grid position on time. This delay can be reduced to 10 minutes after the release of the sailplane, if the last round of sailplanes is towed to starting altitude.

- a. Opening of the start shall be announced by radio. The radio procedures for announcing the start shall be detailed in the Local Procedures.

-
- b. A maximum altitude, expressed in QNH, shall be imposed prior to the opening of the start gate and shall be announced by the Organisers. The Organisers must describe the altitude procedures before starts in the Local Procedures. The altitude(s) shall be specified at the briefing and at the time of opening the start gate the Organisers may:
 - (i) Keep the altitude limit unchanged; or,
 - (ii) Raise the altitude limit to an altitude at least 300 m below the main cloud base; or,
 - (iii) Delete the altitude limit.

7.4.4 **Validity of Starts**

- a. A Start is valid if the GNSS FR shows a valid fix or a straight line between two subsequent valid fixes crossing the Start Line.
- b. If start option (c) is used, a valid start at an incorrect start point may be penalised.
- c. If there is no proof that the competitor had a valid start after the opening of the start in his class, the start may nevertheless be validated if the competitor was within 500 m of the start line or the boundary of the start zone after the opening of the start. The start position and the start time will be derived from the closest GNSS fix, but a penalty shall be applied. If no such event is detected the competitor shall be deemed to not have a valid start.

7.4.5 **Event Marker** The Organisers shall state in the Local Procedures if they require the event marker to be used for marking the starts. If the event marker is to be used:

- a. A minimum interval of at least 15 minutes is imposed between two consecutive starts for each competitor. The Organisers may set a longer time interval or allow only a single start.
- b. A start is valid only if an event mark is recorded by the GNSS at any time after the opening of the start gate and before the start.
- c. A subsequent start is invalid if:
 - (i) Only a single start is allowed, or
 - (ii) The interval between the preceding start and the subsequent start is less than the minimum interval stated by the Organisers, or
 - (iii) No event mark is has been recorded since the last valid start.
- d. If no start has been marked the competitor's last completed start shall be validated as a start but a time penalty of 15 minutes shall be added to the competitor's Marking Time.

7.4.6 **New Starts** A new valid start invalidates all previous performances of the day. Crossing a start line after passing through the observation zone of a turn point or an assigned area is not deemed to be a start unless the crossing time correlates with the pilot nominated start time (see 7.4.7)

7.4.7 **Communication of Start Times** Pilots shall communicate their start times to the Organisers within 30 minutes of their last valid start to an accuracy of two minutes and the Organisers shall publish starting times as quickly as possible. These times shall be used for display of performance and for preliminary results. Penalties may be given for non-compliance or incorrect notification.

An inaccurate start time should not be penalised if the cause of the error is due to an incomplete start, provided a previous start was correctly recorded and notified.

7.5 TURN POINTS AND ASSIGNED AREAS

7.5.1 The Observation Zone for a GNSS Turn Point shall be a cylinder of radius 0.5 km, centered on the turn point.

7.5.2 An Assigned Area shall be formed by:

- a. A circle of a given radius, centred on the central GNSS position, or
- b. Two radials originating at the competition site, or any other designated point, intersecting with arcs located between a minimum and/ or maximum distance from the site or from the designated point, with the central GNSS position lying on the bisector of the radials halfway between the minimum and maximum defined distances.

The edge or boundary of the Assigned Area should lie within the defined Contest Area Boundary

7.5.3 Organisers must avoid setting Turn Points or Assigned Areas close to Start Points. Assigned Areas must not overlap. A minimum separation of 1 km shall be applied between adjacent areas.

Note that the last Assigned Area in a task may enclose the finish, if the finish ring is used.

7.5.4 A Turn Point or Area rounding is valid if the GNSS FR shows a valid fix or a straight line between two subsequent valid fixes within the Observation Zone.

7.5.5 If there is no proof that the competitor passed through the Observation Zone the rounding of the Turn Point or Assigned Area may be validated if the competitor was within 500 m of the boundary of the Observation Zone, but a penalty shall be applied.

7.6 OUTLANDING

7.6.1 **Contest Area Boundary** The Contest Area Boundary is defined as a polygon which encloses all the designated Turn Points. (For the purpose of this definition any Turn Point that is a vertex of the polygon shall be considered to be enclosed by the polygon.) For distance tasks, and in the case of an outlanding, the Organisers shall score the pilot to the real or virtual outlanding position, inside the contest area boundary, that yields the longest Marking Distance. The Organisers shall define the Contest Area Boundary in the Local Procedures.

The line may be defined by joining geographic points or GNSS coordinates.

The Marking Distance includes any penalty applied under 6.3.4.d(v) or 6.3.5.f(ii).

7.6.2 **Real Outlandings** The position and time of a real outlanding shall be determined from the last valid fix on the GNSS flight record when the aircraft comes to rest, before the starting of the MoP, or before the recorder failure, whichever occurs first.

- a. When landing out the competitors shall comply with the instructions given in the Local Procedures. The Organisers shall be informed of an outlanding without delay. Non-compliance shall be penalised.
- b. The Organisers shall assist competitors and crews in every possible way to locate outlanded sailplanes.
- c. The starting of a motor glider's MoP, except as allowed by 5.4d, or a complete failure of the GNSS flight record (see 5.4e) is regarded as a real outlanding.

7.6.3 **Virtual Outlandings** The position and time of a virtual outlanding may be any valid fix on the GNSS flight record preceding a Time-out position (see 6.3.4.c or 6.3.5.e), a real outlanding, or a valid finish.

7.6.4 **Aero Tow Retrieves** The Local Procedures shall state if aero tow retrieves are permitted, and in what way they will be handled.

7.7 FINISHING

7.7.1 **Finish Options** The Organisers shall select one finish procedure for every task from the following options. The Finish procedures selected for the Championship shall be stated in the Local Procedures. The options are:

- a. **Finish Line** A straight line, of defined length, at the elevation of the airfield clearly identifiable on the ground. The finish line shall be so placed that sailplanes can safely land beyond it. A maximum altitude (QNH) and a minimum height (AGL) should be imposed for crossing the line.
 - (i) A finish is valid if the sailplane crosses the finish line, unassisted, in the direction specified at briefing.
 - (ii) Competitors crossing the finish line below the minimum height, except for straight-in landings, or above the maximum altitude, shall be penalised.
 - (iii) The Organisers may establish a number of final Turn Points (control points) to align the sailplanes with the desired direction of finish.
- b. **Finish Ring** A ring of specified radius around the finish point encompassing the airfield and the landing circuits. Maximum and minimum altitudes (QNH) shall be imposed for crossing the ring. Competitors crossing the finish line below the minimum height, or above the maximum altitude, shall be penalised.

Organisers may use a Finish Line for Racing Tasks and Speed Tasks using Assigned Areas and a Finish Ring for all Tasks.

Organisers may only use a Finish Line if a mandatory last Turn Point is set. The Finish Ring is provided to allow the separation of sailplanes arriving from different directions, or in mountainous terrain, or when large gaggles are expected at the finish. It allows each pilot to slow down and concentrate on their circuit procedures and other sailplanes prior to landing.

7.7.2 **Definitions**

- a. The Goal is the center of the finish line or the finish ring.

The last leg distance is assessed from the defined position of the last Turn Point or Assigned Area, to the Goal, less the radius of the finish ring in option (b).

- b. The Finish Time is defined as the time the sailplane first crosses the finish line or finish ring after completing the task.

For competitors on a Assigned Area :

- *If the Designated Time has expired and they are remaining on task, they must remain above the maximum finish altitude otherwise they will be deemed to have finished if their track crosses the finish line or the finish ring.*
 - *If the Designated Time has not expired, they may cross the finish line or the finish ring at any altitude, and the crossing will not be deemed to be a finish unless they then immediately land on the airfield.*
- c. A sailplane landing back at the airfield without crossing the finish line shall be deemed to have finished and shall be given as finish time the time at which the glider stopped moving plus five minutes.

7.7.3 **Finish Procedures**

- a. Competitors shall announce their arrival on the finish line frequency by giving their contest number and the distance to go. The acceptance reply will be the contest number. The Local Procedures shall state the procedure in detail.

All crossings of the finish line should be manually timed to provide finish times for preliminary scoring.

- b. The finish officials shall repeatedly announce strength and direction of the wind, together with other significant meteorological data at the contest site.
- c. The finish line or finish ring shall be closed at sunset, or when all competitors are accounted for, or at a set time announced at briefing. Competitors still on task after closure of the finish line or finish ring shall be considered as outlanded at the last valid GNSS fix immediately preceding the closure time.

7.8 **LANDING**

- 7.8.1 The Local Procedures shall define the landing procedures, and give the radio frequency for landing, which preferably should be the same as the finish line frequency.

- 7.8.2 Hazardous manoeuvres when approaching and after crossing of the finish line shall be penalised. Having crossed the finish line or finish ring the competitors shall land without delay.

- 7.8.3 Landing later than the end of legal daylight is not permitted. Non-compliance shall be penalised.

-
- 7.9 FLIGHT DOCUMENTATION** All flight documentation, including GNSS records, list of overflowed Turn Points, and outlanding certificates shall be handed in after landing within a period which shall be stated in the Local Procedures. The Organisers may also require back-up documentation within a period stated in the Local Procedures. Non-compliance may be penalised.
- 7.9.1 Downloading of the igc-files from the IGC Flightrecorder can be done by the competitor himself, without the supervision of the organizers. These files can be handed in by any data device or transmission, defined in the Local Procedures. All these files have to be validated, to be sure, that they are not altered.

PART 8 SCORING AND PENALTIES

8.1 SCORING SYSTEMS The Championships shall be scored according to one of the scoring systems (a), (b), (c) or (d). The Scoring System selected for the Championship shall be stated in the Local Procedures.

- a. **1000-Points Scoring System:** The Score is expressed in points (the maximum available Score for the Day is 1000 points).

This is the "classic" scoring system used in Championships for years.

- b. **Place Scoring System:** The Score is expressed in places (the maximum available Place Score for the Day is 25).

Place Scoring may be used as a primary scoring system to select the Champions.

- c. **Simplified Scoring System:** A computer independent, cost lowering, sportsmanlike, and simple scoring system. Fundamental idea:
- 1 One kilometre measured distance is calculated one point.
 - 2 Velocity is calculated one point per one kilometer per hour.

8.1.1 Team Cup: This may be used concurrently for a secondary ranking, but not to select the individual Champions. Organisers shall state in the Local Procedures if the Team Cup will be scored.

Team Cup has been used at previous Championships under the labels "World Team Cup", "World Soaring Cup" or "European Soaring Cup". The actual Championships remain fundamentally based on an individual ranking.

8.2 COMMON RULES

8.2.1 Championship Day In order that a Day may be counted as a Championship Day:

- a. A launch opportunity shall have been given to each competitor in the class in time for the competitor to carry out the task of the Day in question, and
- b. More than 25% of the competitors in the class, who have had a competition launch on that Day, fly a Marking Distance of at least 100 km (after any handicapping is applied).

8.2.2 Daily Scores Each competitor shall be given daily Scores based on his performance on each Championship Day. The Score given to each competitor shall be rounded to the nearest whole number, the value of 0.5 being rounded up.

8.2.3 Finisher Any competitor is deemed to be a "finisher" if they reach the Goal after completing the task, even after the expiry of the Designated Time.

8.2.4 **Handicaps** Organisers shall state in the Local Procedures if handicaps are to be used and they shall be applied in accordance with 8.3.2:

- a. To the competitor's Marking Speed for finishers of a Racing or Speed task, or
- b. To the competitor's Marking Distance.

Handicapping is used for Club Class and 20m- 2 – Seater Class Championships only. Handicaps, if used, shall be taken from the latest IGC Handicap list or any other list approved by the IGC for the specific Championships. It is assumed that highest performance glider gets highest handicap. The list of all competitors with their handicaps shall be published before the beginning of the Championships

8.2.5 **Penalties** Flights that have been disqualified shall be given a zero Score for the Day, but shall be included in the scoring formula. Any penalties shall be deducted from the competitor's Score after it has been calculated, according to this Section.

If the penalty reduces a competitor's raw performance for the day (eg: outlanded at the point of airspace entry) the penalty must be applied before the calculation of the Score.

The appropriate penalty should be applied each time an infringement occurs (eg exceeding the maximum permitted` altitude is penalized for each infringement).

If the Day score after deduction of any penalties is less than zero, it shall be taken as zero, unless 8.8.4 applies.

8.2.6 **Cumulative Scores** Cumulative and Final Scores shall be calculated by adding the points obtained each Day on the nominated scoring system.

8.3 DEFINITIONS OF SCORING PARAMETERS In the following tables:

- AA** stands for Assigned Area tasks
- CC** stands for Pilot selected (Cat's Cradle) tasks
- X** indicates that the parameter is used (if a given parameter is not used it is deemed equal to zero)
- O** indicates that the parameter may is optional (the option is to be specified in the Local Procedures)
- indicates that the parameter is not used

8.3.1 **Championship Days**

The parameters used for scoring each Championship Day are:

	Racing	Speed AA	Distance AA	
Dt	X	X	X	Task Distance - set at the briefing (for information only)
Td	–	X	X	Task Designated Time - set at the briefing (in Racing tasks Td=0)
Dm	X	X	X	Minimum Handicapped Distance to validate the Day - equal to 100km
n1	X	X	X	Number of competitors who achieve a Handicapped Distance (Dh) of at least Dm
n2	X	X	–	Number of finishers exceeding 2/3 of best Handicapped Speed (Vh)
N	X	X	X	Number of competitors in the class having had a competition launch that Day
Ho	X	X	X	Lowest Handicap of all competitors in the class
Do	X	X	X	Highest Corrected Distance (Dc) of the Day
Vo	X	X	–	Highest finisher's Handicapped Speed (Vh) of the Day
To	X	X	–	Marking Time (T) of the finisher whose Vh = Vo (in case of a tie, lowest T applies)
Pm	X	X	X	1000-point system, maximum available Score for the Day, subject to correction by the Day Factor
Pdm	X	X	X	1000-point system, maximum available Distance Points for the Day
Pvm	X	X	–	1000-point system, maximum available Speed Points for the Day
Pn	X	X	X	Place system, number of Place Scores available for the Day
F	X	X	X	1000-point system, Day Factor
Day	X	X	X	If the Day is not a Championship Day (see 8.2.1) then all Scores = 0, except see 8.2.5 if a penalty applies

Note: Parameter 'To' does not apply if there are no finishers

8.3.2 Competitors

The parameters used for scoring each Competitor are:

	Racing	Speed AA	Distance AA	
D	6.3.1	.2	.4	Competitor's Marking Distance, assessed as defined in the specified Section 6.3
H	X	X	X	Competitor's Handicap, if handicapping is applied; else H=1
Dh	X	X	X	Competitor's Handicapped Distance = $D \times Ho / H$
Dg	–	O	O	Competitor's straight Distance to the Goal (if Outlanding Penalty is used)
M	–	O	–	Outlanding Penalty (Distance reduction), if used $M = \frac{1}{2} Dg \times Ho / H$; otherwise $M = 0$
M	–	–	O	Outlanding Penalty (Distance reduction), if used $M = 0.2 \times Dh + \frac{1}{2} Dg \times Ho / H$; otherwise $M = 0$
T	X	X	–	Finisher's Marking Time = the time elapsed between the competitor's Start Time and his Finish Time or: the task Designated Time (Td), whichever is longer
Dc	X	–	–	Competitor's Corrected Distance = Dh
Dc	–	X	X	Competitor's Corrected Distance = $Dh - M$
Pd	X	X	X	1000-point system, competitor's Distance Points
V	X	X	–	Finisher's Marking Speed = D / T
Vh	X	X	–	Finisher's Handicapped Speed = $D / Tx Ho / H$
Pv	X	X	–	1000-point system, finisher's Speed points
S	X	X	X	Competitor's Score for the Day, expressed in Points, Kilometres or Places

Note for scorers:

Before closure of the finish line, in order to keep preliminary results representative, it shall be presumed that competitors not accounted for are finishers, with $Dh \geq Dm$ and $Vh = Vo$, but they shall not appear in the ranking.

The value of 'M' should be stated in the Local Procedures.

8.4 1000-POINTS SCORING SYSTEM

8.4.1 Racing Tasks

a. Day Parameters:

P_m = the least of either: 1000 or: $(5 \times D_o) - 250$ or: $(400 \times T_o) - 200$

F = the least of 1 and $(1.25 \times n_1 / N)$

$P_{vm} = 2/3 (n_2/N) \times P_m$

$P_{dm} = P_m - P_{vm}$

The maximum points for the Day will be less than 1000 points if the Task Distance is less than 250 km or the winner's time is less than 3 hours, with the consequence that scoring gaps are limited to 4 points per Kilometre and 11 points per minute.

If there are no finishers, then P_m = the least of 1000 or: $(5 \times D_o) - 250$

b. Competitor's Score:

(i) For any finisher:

$P_v = P_{vm} \times (V_h - 2/3 V_o) / (1/3 V_o)$

$P_d = P_{dm}$

Except: If $V_h < 2/3 V_o$ then $P_v = 0$

(ii) For any non-finisher:

$P_v = 0$

$P_d = P_{dm} \times (D_c / D_o)$

(iii) **$S = F \times (P_v + P_d)$**

If almost everyone finishes, a pilot with 2/3 of the best speed will get about 1/3 of the points. All non-finishers will get fewer points, proportional to their distance

8.4.2 **Speed Tasks**

a. **Day Parameters:**

P_m = the least of either: 1000 or: $(5 \times D_o) - 250$ or: $(400 \times T_o) - 200$

F = the least of 1 and $(1.25 \times n_1 / N)$

$P_{vm} = 2/3 (n_2/N) \times P_m$

$P_{dm} = P_m - P_{vm}$

The maximum points for the Day will be less than 1000 points if the Task Distance is less than 250 km or the Task Time is less than 3 hours, with the consequence that scoring gaps are limited to 4 points per Kilometre and 11 points per minute.

If there are no finishers, then P_m = the least of 1000 or: $(5 \times D_o) - 250$

b. **Competitor's Score:**

(i) For any finisher:

$P_v = P_{vm} \times (V_h - 2/3 V_o) / (1/3 V_o)$

$P_d = P_{dm}$

Except: If $V_h < 2/3 V_o$ then $P_v = 0$

(ii) For any non-finisher:

$P_v = 0$

$P_d = P_{dm} \times (D_c / D_o)$

(iii) **$S = F \times (P_v + P_d)$**

If almost everyone finishes, a pilot with 2/3 of the best speed will get about 1/3 of the points. All non-finishers will get fewer points, proportional to their distance.

8.4.3 **Distance Tasks**

a. **Day Parameters:**

P_m = the least of either: 1000 or: $(5 \times D_o) - 250$

F = the least of 1 and $(1.25 \times n_1 / N)$

The maximum points for the Day will be less than 1000 points if the Task Distance is less than 250 km, with the consequence to limit the scoring gaps to 4 pts/km.

b. **Competitor's Score:**

$S = F \times P_m \times D_c / D_o$

All pilots receive points proportional to their distance

8.5 PLACE SCORING SYSTEM

8.5.1 Each competitor shall first be assessed on their daily Score according to 1000-Points or Kilometre scoring system, then receive Place Scores according to their Day ranking.

8.5.2 The maximum Place Scores available (P_n) shall be the least of:

- a. 20 points, or
- b. The half of the number of pilots having had a competition launch for the Day, or
- c. The number of pilots having achieved a Handicapped Distance (D_h) of at least D_m .

8.5.3 The Day's winner shall be given a Place Score equal to ($P_n + 5$); the second placed pilot, ($P_n + 2$); the third placed pilot ($P_n - 1$); the fourth placed pilot ($P_n - 3$) and each following pilot 1 Place Score less. The P_n^{th} placed pilot shall be given a Place Score of 1.

8.5.4 Competitors finishing the task, but who are placed lower than the P_n^{th} placed pilot, shall receive a Place Score of 1.

Place Scores will therefore be 25, 22, 19, then 17, 16, down to 1 points for the first 20 competitors, then 1 point for every finisher and 0 points for other competitors of the Class (this example assumes that 40 or more pilots have had a valid competition launch and 20 pilots or more have achieved at least 100 km)

8.5.5 In case of a tie of two or more pilots, all tied pilots shall receive the same Place Scores (as if they were sole at their place). The Place Scores of lower ranking pilots are unchanged.

For example if there is a tie of three pilots at the third place they all are scored as if they were 3rd and next ranked pilot be scored as if he were at the 6th place.

8.5.6 Pilots not having had a competition launch for the Day, or not having achieved any primary score greater than zero, or being disqualified for the Day, shall be given no place Scores.

8.6 SIMPLIFIED SCORING SYSTEM

8.6.1 Each competitor shall be assessed on their daily performance of average speed and accomplished distance.

8.6.2 Fundamental idea:

- a. One kilometre measured distance is calculated one point. (P_d)
- b. Velocity is calculated one point per one kilometre per hour. (P_v)
- c. Use a velocity-factor (V-factor) between 1 and 3. (V_f)
1 up to 250 km, 2 up to 500 km, 3 for more than 500 km .

8.6.3 The Competitor finishing a task shall be given a Score(P) equal to
 $P = P_d + V_f \times P_v$

8.6.4 Competitors not finishing the task shall be given a Score(P) equal to
 $P = P_d$

8.7 TEAM CUP

- 8.7.1 Each team, that consists of a team of minimum 2 pilots, shall be assessed daily on the mean of the Relative Scores of all of their pilots having had a competition launch that Day, according to the primary scoring system.
- 8.7.2 Relative Scores are defined as the competitor's Score, divided by the Day winner's Score, multiplied by 1000.

8.8 PENALTIES AND DISQUALIFICATION

- 8.8.1 The Championship Director shall impose penalties for infringement of, or non-compliance with, any Rule or Local Procedure. The severity of the penalties ranges from a minimum of a warning to disqualification as appropriate for the offence. The penalties imposed by the Championship Director shall be in accordance with the appropriate list of penalties stated in Section 8.9 below:
- a. 1000-Points Scoring System – penalties applied directly.
 - b. Place Scoring Systems – penalty applied as for the scoring system in use - 1000-points or Kilometre - to assessing Place Scores.
 - c. Simplified Scoring system – penalty applied with an equivalence of 1 Points / Vf for each points in the table.
- 8.8.2 Offences not covered by this list may be penalised at the Championships Director's discretion in accordance with the provisions of the Sporting Code, General Section 5.2.
- 8.8.3 Penalties shall be listed on the Score sheet of the Day on which the penalty was given.
- 8.8.4 If a penalty is imposed on a Day which does not meet the requirements of a Championship Day (8.2.1), or non-competition Days, or during the practice week, then the penalty shall be added to the competitor's cumulative Score.
- This rule is intended to apply to penalties that are awarded for disciplinary or safety reasons and not penalties that are awarded for a technical failure.*
- 8.8.5 A competitor who has been disqualified shall surrender his Sporting Licence according to the Sporting Code, General Section 5.3.

8.9 LIST OF APPROVED PENALTIES

Type of Offence	First Offence	Subseq. Offence	Max Penalty
Overweight/Underweight of W kilograms	W x 2 pts	n x W x 2 pts	n x W x 2 pts
Wrong, late or missing information			
Documentation not complete	No launch	No launch	No launch
Configuration check not complete	No launch	No launch	No launch
Notification of start time > 30 min after start	Warning	10 pts	25 pts
Declared start time differing from the real time	Warning	10 pts	25 pts
Changing FR without advising the Organisers	10 pts	20 pts	25 pts
Incorrect FR adjustment (Time interval between fixes > 10 sec)	Warning	10 pts	25 pts
Late delivery of documentation (FR, outlanding certificate) > 30 minutes	Warning	10 pts	25 pts
Late delivery of backup documentation > 60 min.	Warning	10 pts	25 pts
Incomplete Outlanding report	Warning	10 pts	25 pts
Tampering with Tracking equipment	Warning	10 pts	25 pts
Incorrect Start			
Between 0 and 0.50 Km from the start line	50 pts	50pts	50pts
More than 0.50 km from the start line	No valid start	No valid start	No valid start
Valid Start at Incorrect Start Point	100 pts	100 pts	100 pts
Incorrect Rounding of Turn Points or Areas			
Less than 0.50 km from the boundary of the Turn Point or Area	50 pts	50 pts	50 pts
More than 0.50 km from the boundary of the Turn Point or Area	No Control	No Control	No Control
Dangerous or hazardous flying			
Cloud flying	100 pts	Day Disqual.	Disqualification
Circling in wrong direction in the local zone	Warning	(n-1) x 25 pts	Disqualification
Circling in the start zone	Warning	(n-1) x 25 pts	Disqualification
Towing: early or late release	Warning	(n-1) x 25 pts	Disqualification
Towing: pull-up before release	Warning	Day Disqual.	Disqualification
Finish: crossing below height or altitude limit	Warning	(n-1) x 25 pts	Disqualification
Finish: hazardous manoeuvre	Warning	(n-1) x 25 pts	Disqualification
Landing: incorrect landing lane	Warning	(n-1) x 25 pts	Disqualification
Flying above the absolute altitude limit (defined at briefing) if excess altitude < 100m	1 pt/m	n pts/m.	Day Disqual.
Flying above the absolute altitude limit (defined at briefing) if excess altitude > 100m	Outlanded at the point of airspace entry	Day Disqual.	Disqualification
Starting above the altitude limit	1 pt/m	n pts/m	Day Disqual.
Entering restricted or closed airspace	Outlanded at the point of airspace entry	Day Disqual.	Disqualification
Landing after legal daylight	10 pts/min	Day Disqual.	Disqualification
Cheating or falsifying documents			
Falsifying documents	Disqualification	Disqualification	Disqualification
Attempt to obtain external help for finding lift from non competing glider or airplane	Day Disqual.	Disqualification	Disqualification
Other Violations			
Flying under influence of alcohol	Day Disqual.	Disqualification	Disqualification
Positive doping control	See FAI policy	See FAI policy	
Wing Span Penalty in 20m-2-seater, 18m, 15m, STD Class & Club Class (#)	1 pt/cm	1 pt/cm	1 pt/cm

(#) If the span of a glider in the 15 m Class or in the Standard Class exceeds 15,000 mm, a penalty of a fixed number of points shall be subtracted from the daily score. The number of daily penalty points is obtained by subtracting 0.3 cm from the measured overspan, then rounding this number to the nearest whole cm.

Examples:

- (i) A 2.7 cm overspan will give daily penalty points of $2.7 - 0.3 = 2.4$ which is then rounded down to 2 points.
- (ii) A 3.9 cm overspan will give daily penalty points of $3.9 - 0.3 = 3.6$ which is then rounded up to 4 points.

PART 9 COMPLAINTS AND PROTESTS

9.1 COMPLAINTS

- 9.1.1 The purpose of a complaint is to obtain a correction without the need to make a formal protest.
- 9.1.2 Prior to the Championships a complaint may be made by an NAC. Such a complaint may concern only failure of the organizing NAC to comply with the regulations for entry or the eligibility or refusal of an entry. A copy of such a complaint shall be sent immediately to the Secretary General of the FAI, who shall keep the President of the IGC informed.
- 9.1.3 At any time during the Championships a complaint may be made through the Team Captain to the Championship Director or his designated official. Such complaint shall be dealt with expeditiously.
- 9.1.4 If a competitor has no separate Team Captain, he may lodge the complaint himself.

9.2 PROTESTS

- 9.2.1 Protests may not be filed against the Championship's Rules.
- 9.2.2 A protest against a decision on a complaint as described above in 9.1.2 must have been made prior to the start of the Opening Ceremony of the Championships.
- 9.2.3. The amount of the Protest Fee shall be stated in the Local Procedures. The protest fee shall be returned if the protest is upheld, or is withdrawn prior to the hearing by the Jury.
- 9.2.4 When dissatisfied with a penalty or the decision on a complaint made during the Championships a competitor has the right of protest.
 - a. Such a protest shall be made in writing, in English, and shall contain the following elements:
 - (i) It shall refer to the decision against which the protest is lodged,
 - (ii) It shall include reasons for the protest, and
 - (iii) It shall state the remedy sought by the protest
 - b. A Protest shall be handed to the Championship Director or his designated official, by the Team Captain, together with the protest fee within 14 hours (2 hours on the last day) of the publication of the ruling or decision against which the protest is made.
 - c. If a competitor has no separate Team Captain, he may lodge the protest himself.

9.3 TREATMENT OF PROTESTS The Championship Director shall deliver a protest to the Jury President without delay.

- a. The President of the Jury shall call a meeting of the International Jury within 24 hours (as soon as possible on the last day) of receiving the protest from the Championship Director.
- b. The Jury shall hear both sides on the matter of any protest, applying correctly the relevant FAI Regulations and the Rules for the Championships. In considering the protest the Jury shall be provided with access to all persons and information to assist in their considerations.
- c. The Championship Director is bound by the decision of the International Jury.

9.4 APPEALS An NAC may appeal to FAI against a decision of the Jury in accordance with the provisions of FAI Sporting Code, General Section, Chapter 9.

PART 10 RESULTS AND PRIZEGIVING

10.1 RESULTS

10.1.1 Definition of status of results:

- a. Performance: The competitors' results expressed in distance, speed, or time. They may be displayed on screens only;
- b. Preliminary Results: Performances converted to points, before any verification. They may be displayed on screens only;
- c. Unofficial Results: Preliminary results after verification of flight records from all competitors and including penalties;
- d. Final Results: Unofficial results after expiry of the protest time and after all protests have been dealt with.

10.1.2 All Unofficial and Final Results shall be published with minimum delay clearly indicating the status of the result and the time of publication and with the pilots ranked by their performance for the day. Unofficial Results shall include the expiry time for protests and Unofficial Results and Final Results shall be signed by the Championship Director or his nominated Deputy.

Performance and Preliminary Results should be displayed as soon as possible to enhance media, public and competitor awareness of the championship results.

10.1.3 The cumulative scores of the Championships shall be final only after the Jury has ceased its functions. They shall be published before the Prizegiving is held.

10.2 PRIZEGIVING

10.2.1 At the Closing Ceremony the flags of the countries of the competitors placed first (the Champions), second and third should be flown and the national anthems of the countries of the Champions should be played. The Local Procedures shall state what flags, discs or tapes should be brought by the competitors.

10.2.2 The FAI will award a Gold, Silver and Bronze medal in each Championship class to the competitors placed respectively first, second and third.

- a. Up to 10 Diplomas will be awarded to the first third of the competitors in each class.
- b. Awarded Challenge Cups shall be held by the winners until they are put back into competition for the following Championships.
- c. The Organisers shall award prizes to at least the top 25% of competitors in each class, and give commemorative medals or badges to all competitors, their assistants, and officials.
- d. Small prizes may be given to the daily winners.

10.2.3 There shall only be one champion. If two or more pilots have the same number of points after the final competition day, the sequence between these pilots shall be decided by the daily results. The Champion shall be the pilot who has the most daily wins. If a tie still exists, the Champion shall be the pilot with the most second placings, and so on.

PART 11 LOCAL PROCEDURES

Organisers of Championships shall use these guidelines for their Local Procedures. Each Local Procedure is identified by the appropriate Annex A paragraph number.

*The details in **Part A CHAMPIONSHIP DETAILS** must be completed.*

The Local Procedures must be submitted to the Annex A working group as a stand-alone document for approval before being published. To enable this approval process the Local Procedures must be submitted to the Annex A working group at least six months before the opening ceremony.

The Local Procedures should not be published in any public place, including on a website, before they are approved. This is to avoid confusion arising should changes be required as part of the approval process.

The IGC shall approve the appointment of the Jury and Stewards.

After approval the Local Procedures may be published as a stand-alone document, or incorporated in the Annex A Rules with each Local Procedure being inserted after the corresponding rule using a distinctive font.

A CHAMPIONSHIP DETAILS

Name of the Event

Location of the Event

Time Schedule

Preliminary entries due
Final entries due 3.4.1
Deadline for Class change 3.4.3b
Deadline for approval of new GNSS FRs 5.4a
Airfield closed for training flights
Unofficial training
Registration Period 3.5.1/ 3.5.2
Official training 1.2.3
First official Team Captains briefing
Configuration change closes 4.1.2b
Opening Ceremony 1.2.3
Contest flying 1.2.3
Farewell party 1.2.3
Closing Ceremony and Prizegiving 1.2.3

Competition Officials

Director of the Championships
Deputy Director
Task Setter
Chief Scorer

International Jury

President
Members

Stewards

Chief Steward
Steward(s)

Addresses for Correspondence and Entries

B GENERAL

- 1.1 Additional objectives of the Championships
- 1.3.1 Championship classes
- 1.4.1 Additional safety rules
- 1.4.3 National requirements concerning doping test

C NATIONAL TEAMS

- 3.4.2 Entry fee
- 3.4.3 a. Number of allowable entries per NAC
- 3.4.3 c. Total number of allowable entries
- 3.4.3 c. Procedures for managing more than 50 entries in one Class
- 3.5.4 a. Additional documentation required
- 3.5.4 b. Documents required to be carried on board the sailplane
- 3.6.1 Third party insurance cover

D TECHNICAL REQUIREMENTS

- 4.1.1 *note* Mandatory additional equipment
- 4.1.2 b. Instruments that must be removed from the sailplane
- 4.1.2 *note* High visibility marking requirements
- 4.1.2 *note* Carriage of GNSS data transmitters for public displays
- 4.2.2 *note* Procedures for checking aircraft mass

E GENERAL FLYING PROCEDURES

- 5.2 Units of measurement
- 5.3.1 a. Radio communication required for contact with Air Traffic Services
- 5.3.1 b. Data transmission requirements
- 5.3.1 c. Radio frequencies to be used during the Championships
- 5.3.1 d. Frequencies allocated for flight safety

F TASKS

- 6.1 Types of tasks that will be set

G COMPETITION PROCEDURES

- 7.1 d. Requirements for discharging water ballast on the grid
- 7.2.2 Contest site boundaries
- 7.3.2 Launch procedures for motor gliders
- 7.3.3 *note* Areas where continuous circling is prohibited or permitted in one direction only
- 7.4.2 Types and definitions of starts that will be used
- 7.4.3 a. Radio procedures for announcing the start
- 7.4.3 b. Altitude procedures for the starts
- 7.4.5 Requirement for the Event Marker
- 7.4.5 a. Time interval between starts if the event marker is used.
- 7.6.1 Contest area boundary
- 7.6.2 a. Instructions for real outlandings
- 7.6.4 Provision of and requirements for, aero tow retrieves
- 7.7.1 Types and definitions of finishes that will be used
- 7.7.1 a. Minimum height and maximum altitude for the finish line, **or**
- 7.7.1 b. Minimum and maximum altitudes for the finish ring
- 7.7.3 a. Finishing procedures
- 7.8.1 Landing procedures
- 7.9 Handling of flight document

H SCORING

- 8.1 Type of scoring system
- 8.1.1 Scoring of Team Cup
- 8.2.4 List of Handicaps
- 8.3.2 Penalty of Outlanding (M)

I PROTESTS

- 9.2.3 The value of the protest fee

J PRIZEGIVING

- 10.2.1 Requirements for flags, discs and tapes

CONFIGURATION CHECKS FOR THE PW5

One of the objectives of the World Class and the World Class glider is to give equal chances to the pilots participating in a competition.

The World Class glider is actually (January 2002) the PW-5, designed and manufactured in Poland. It was selected by FAI-IGC on March 1994 after the results of a design & prototype competition taking place at Oerlinghausen, Germany, September/October 1992.

The PW-5 will maintain its status of World Class glider till March 2009, i.e., for 15 years since type certification in March 1994, unless before then one or more of the conditions of the Agreement between FAI and the Warsaw University of Technology (September 1997) is no longer complied with.

As requested by FAI-IGC the PW-5 is fully certificated by the Polish airworthiness authority on the basis of the JAR-22 requirements, category U, cloud flying and limited aerobatics allowed.

The Flight Manual limits are:

Maximum mass:	300 kg
Maximum empty mass:	190 kg
Maximum cockpit load:	110 kg
Minimum pilot + parachute mass:	55 kg

A general description of the aircraft, including a 3-view drawing, is given in the Flight Manual, pages 1.3 and 1.4.

The PW-5 is actually (January 2002) produced by two manufacturers, both in Poland: PZL Swidnik (since 1994) and PZL Bielsko 1 (since 2000). The two versions have a few different features and accessories but, as specified by FAI, the external geometry and the mass of the gliders is the same.

TECHNICAL CHECKS

In order to ensure that competing gliders in the same competition have the same flight performance, two basic checks have to be made:

1. A check of the external geometry, intended to verify that the shape, size, state of the external surface of the gliders are the same so that the airflow over the external surfaces occurs with the same characteristics; and
2. A check of the glider masses, intended to verify that the take-off weight is the same for all gliders.

According to Annex A of the Sporting Code, "Each sailplane shall be made available to the Organizers at least 72 hours before the briefing on the first championship day for an acceptance check in the configuration in which it will be flown. This configuration shall be kept unchanged during the whole competition."

1. **Geometry Checks**

The following geometry checks should be carried out:

Wing Span The nominal value of 13440 mm shall be checked assuming a reasonable tolerance due to thermal effects. The measurement shall be made in compliance with the Sporting Code – Sec.3, para.7.1.3.

Wing Sections High precision templates are available to check the airfoil contour at three different stations along the semi span of each wing.

Wing-Fuselage Fairing A template is available to check the correct size and shape of the fairing at the trailing edge of each wing.

Wheel Fairings Templates are available to check the correct size and shape of the fairings of the front wheel and the rear (main) wheel.

Alteration to Airflow Checks shall be made to verify compliance with the Sporting Code-Sec. 3, para.7.7.5, which states: “Any alteration affecting airflow around the glider is prohibited. This includes, but is not limited to, the use of turbulation devices, fairings, and special surface treatment. The only exceptions are:

- (i) A yaw string,
- (ii) A total energy probe,
- (iii) Adhesive tape to seal gaps between wings, fuselage and tail.

Sealing between moveable control surface and the airframe is not permitted.”

Additional Inspection Verify by visual inspection any abnormality on the external surface and shape of the glider.

2. **Mass Checks**

The following mass checks should be carried out:

Scales Two scales at least shall be available, located at the front and main wheel, respectively, allowing two contemporary measurements the sum of which gives the total mass. The scales shall be adequate in range (up to 350 kg at least) and accuracy (± 1 kg at 300 kg).

Take-Off Mass During the training period, three days at least before the start of the competition, the Director shall fix the glider take-off mass, which shall be identical for all competing gliders. It is likely that the value of this mass has to be 300 kg, i.e. equal to the maximum permitted mass. This is due to the existence of at least one heavy pilot among the competitors, reaching the mass limit without the addition of any ballast (as has occurred in all three World Championships so far, at the present time of January 2002). To attain the specified mass each glider shall incorporate the required amount of fixed ballast to be accommodated under the pilot's seat. Tail ballast is permitted.

Additional Weighing it is strongly recommended that the following additional weighing operations are made and that the results are recorded and made available to the pilot concerned:

- a. Glider empty, i.e., without pilot and parachute but including loose items such as thermos, drinks, tie-down equipment, additional clothing etc.;
- b. Pilot;
- c. Parachute.

CENTRE OF GRAVITY CONTROL

Verify compliance with Sporting Code – Sec.3, para. 7.7.5 d which reads: “Any device capable of altering the centre of gravity location of the glider during flight is prohibited.”

ELECTRICAL DEVICES

According to the Sporting Code – Sec.3, para. 7.7.5 b “Electrical and electronic devices are allowed, including instruments and navigational aids.”

RANDOM CHECKS

During the competition days, when the gliders are on the way from the parking area to the grid, at the choice of an official designated by the Director of the competition, random checks of the glider’s weight are carried on.

Cases of non-compliance with the preset value of the glider weight are reported to the Director.

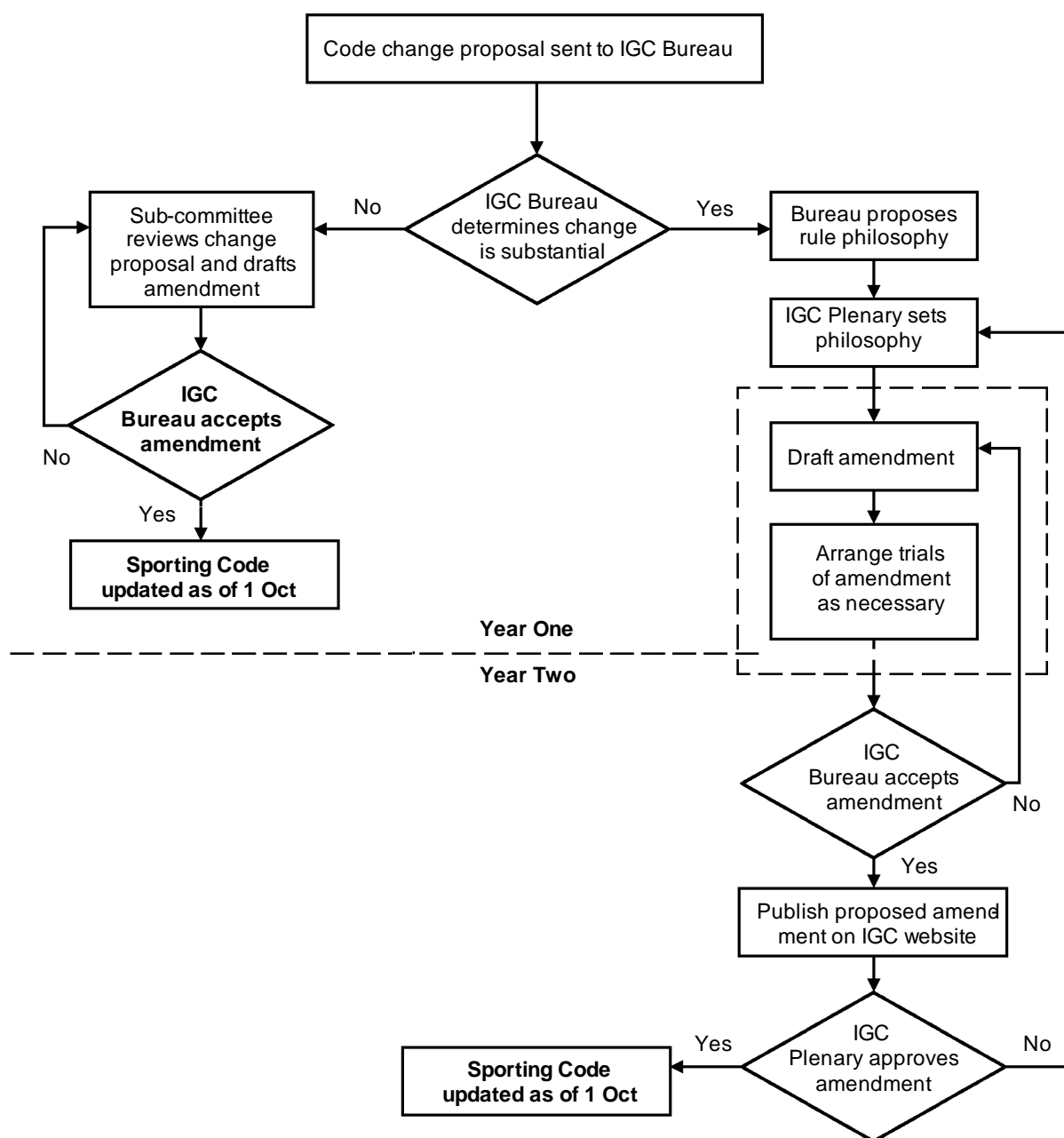
SPORTING CODE REVIEW AND CHANGE PROCESS

A proposal for an amendment to the Sporting Code or its annexes must be submitted to the IGC Bureau on the **01.October in the year** prior to the next IGC Plenary meeting. A proposal must refer to the paragraphs affected and give reasons for the amendment. It is preferable for the proposed change to be in the format of the Code.

The Bureau will review the proposal and determine if it is “substantial” or otherwise, following input from the specialist sub-committee. The Bureau will instruct the specialist sub-committee to process items that are clarifications of existing rules, or prepare discussion papers on substantial proposals for consideration at the next Plenary meeting. At the Plenary meeting, the philosophy behind a substantial amendment will be considered and set. The specialist sub-committee will then draft the Code amendment with Bureau feedback, and have it tested as required. The proposed amendment will then be put on the IGC web site prior to the following Plenary meeting, at which time it will be submitted for approval or rejection. See the action flowchart following for details.

A Code clarification becomes effective on the 1st of October following approval by the Bureau. A substantial change become effective on the 1st of October following the IGC meeting at which it is approved, except that if it has flight safety implications it may be approved by the Bureau prior to the IGC meeting.

Sporting Code (Annex A) Review and Change Process



IGC HANDICAP LIST 2006

Index	Glider Typ	Max.weight non-lifting parts	MTOW without Water	MTOW	Ref.-weight
1,07	DG 200	250	360	480	365
1,07	DG202(15m)	250	360	480	365
1,07	Vega(15m)			354	354
1,07	DG500/505 Orion(20m)	445	657	750	
1,07	ASW24 , B	245	365	500	357 / 365
1,07	LS 3, a	240 / 230		472	410 ?
1,07	Mini Nimbus , C	230 / 220		450 / 500	370
1,07	Mosquito	240	380	450	380
1,07	D 40				
1,07	BS 1				
1,07	Diamant 18m	240	408	440	400
1,07	D 36				
1,07	LS7	235	389	486	365
1,06	DG 1000/18m				
1,06	FK-3				
1,06	SB 8				
1,06	Speed Astir II	260	400	515	380
1,06	PIK 20 D				364
1,06	PIK 20 E				
1,06	B 12				
1,06	Calif A 21		644	644	
1,06	Glasfluegel 304C(W)			450	360
1,06	Janus C without retractable gear	400		700	
1,05	LS 4 , a	230		472 / 525	385 ?
1,05	DG 300	246		385 / 500	372
1,05	Falkon				
1,05	LS 3 Std.				
1,05	SB 12				
1,05	AFH 24				
1,05	Glasfluegel 304C			450	360
1,04	AK 5				
1,04	Pegase (all versions)	235	368	455	368
1,04	Mue 26				

1,04	Diamant 16,5m	220	390	408 / 454	390
1,04	Cirrus 18,34m	250	400	460	390
1,04	DG 505 Orion 18m	445		650	
1,04	Janus 18,2m	440	620	620	
1,03	DG 300 without retractable gear				370
1,03	LS 2				
1,03	H 301	200		300	300
1,02	ASW 19 a,b (w)	225 / 230		408 / 454	380
1,02	LS 1f(w)	230		390	355
1,01	Hornet(w)	225		420	355
1,01	ASW 19 a,b	230		454	380
1,01	Std. Cirrus B 16m	220	330	330	330
1,01	LS 1f, 45	230		390 / 439	355
1,01	Jantar Std. 2	245	385	535	385
1,01	Jantar Std. 3		390	540	385
1,01	Jantar Std. 3 Bravo				
1,01	SZD 59				
1,01	Std.Libelle 17m	210		350	325
1,01	DG 100	265	385	418	385
1,00	Hornet , C	225		420 / 450	355
1,00	Hornet H 204	225		350	350
1,00	Std.Jantar 1		360	460	360
1,00	Cirrus, Cirrus B (w)	220	330	390	330
1,00	Cirrus G (w)	220		390	330
1,00	Cirrus CS 11-75 L	220	345	390	345
1,00	Std.Astir				385 ?
1,00	Phoebus B3				
1,00	Phoebus C1				
1,00	D 37				
1,00	SB 7				
1,00	Elfe 17m				
1,00	Cobra 17m				
0,99	Std.Libelle (w)	210		350	323
0,99	ASW 15 a (w)	198	318	318	318
0,99	ASW 15 b (w)	220		408	365
0,99	Std Cirrus ,b	220	330	330/390	330

0,99	Std Cirrus G	220		390	330
0,99	Std Cirrus CS 11- 75	220	345	390	345
0,99	ASW 19 Club	230		454	380
0,98	ASW 15 a	198	318	318	318
0,98	ASW 15 b	220		408	365
0,98	Std.Libelle H-201	210		290	290
0,98	Std Libelle H-201 B	210		350	323
0,98	Std Libelle H-202	210		350	323
0,98	Std Libelle H-203	210		380	325
0,98	LS 1 0				345
0,98	LS 1 c				345
0,98	LS 1 d				345
0,98	Cobra 15	247	385	385 / 500	375
0,98	DG 100 Club	265	385	418	385
0,98	D 38				
0,98	Mue 22b				
0,98	Pajno V1/2				395
0,97	SHK				
0,96	Astir CS	240	380	450	380
0,96	Astir CS 77	240	380	450	380
0,96	Club Libelle	225		350	350
0,96	Salto 15/15,5m				
0,96	Elfe S3			350	350
0,96	Elfe S4			370	370
0,96	Mistral C			350	350
0,96	Phoebus B3				
0,96	IS 29 D				
0,96	gear				
0,96	VSO 10				

Landing gear changes Handicap by
0.02 / Winglets change Handicap
by 0.01 / Any Glider with Handicap
1,07 and winglets is not eligible for
Club Class

The pilot is responsible to proof, that his glider is operated within the legal weight limits

- The handicap is based on the performance at a stated glider reference weight, which is based on a typical empty weight plus 110 kg. Where a glider is flown at a higher weight by necessity, the handicap will be increased by 0.005 for each 10 kg or part thereof that the glider exceeds the base handicap weight.