

Rules updates for 2012

- 1.10 Contest organizer may limit class size or total number of competitors in the competition.
Rationale: Address the problems we had at the 2011 Nats (too many competitors for Club).
Looking at the registrations, I don't foresee a problem this year but it provides for the contest organizer to declare a cut-off if there are a lot of walk-ins.
- 8.2 Jury candidates: Look for experienced contest pilots who are not involved and past CDs CMs.
- 11.9 Minimum Finish Height: Changed to **discretion of the CD but at least** 500 ft above the finish point. The intent is to leave it at 500 ft as this is the international norm. However, it provides flexibility to raise it if deemed necessary for safety reasons.
- 20.4 Handicaps – reference latest SSA list (note: different provisions for water 1.4). For gliders not on the list, the Sporting Committee will decide the handicap.
- 20.5 Cross reference list updated between Canadian rules and US rules
- 20.9 Results need to be published before the next pilots meeting. This has always been the established practice.
- 21.2 Deleted – not required and not consistent with current terminology in US rules

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Soaring Association of Canada



2012

National Soaring Competition
RULES AND REGULATIONS

Rev.: June 9, 2012

PREAMBLE

Statement of Purpose for the Canadian National Championships:

- **Determine the Canadian Champion.**
- **Establish the seeding list for participation in World Gliding Championships.**
- **Encourage the participation of young and novice pilots.**
- **Promote competitive soaring to the Canadian soaring community at large, particularly the host club.**
- **Encourage the participation of club members in club equipment.**
- **Promote goodwill, friendship and fair competition among soaring pilots from all parts of the country.**
- **Safety is paramount!**

This statement of Purpose shall serve to give direction for the future evolution of these rules and guide jury decisions in cases where the rules are not sufficiently clear. At no time shall this Statement of Purpose be interpreted as allowing preferential treatment for individual categories of pilots (i.e. Novice, Club, etc)

In this document, wherever the word he, his or him is used, it should be taken as he/she, his/hers or him/her.

1 COMPETITION CLASSES

1.1 The Canadian National Soaring Competition recognizes six FAI classes (Open, 18 meter, 15 meter, Standard, World and Club Class). A competition to determine National Champions may be held in each class for which there are five or more entries from Canadian pilots.

1.2 Classification of sailplanes by FAI class shall be in accordance with the FAI Sporting Code, Section 3, paragraph 7.7 Competition Classes.

1.3 If there are insufficient contestants in the individual classes for a meaningful* competition, all gliders with a dry SAC handicap of 0.95 or less, rounded to two decimal places, can at the discretion of the organizer, be combined into a single handicapped class. The name of the class shall be "Handicapped FAI Class". Scores will be computed using glider handicaps as appended to these rules and regulations.

* Past experience has shown that a class with less than 10 competitors can lead to undesired scoring effects.

1.4 Any sailplane with a SAC dry handicap of 0.90 or greater, rounded to two decimal places, may enter the Club Class. Scores will be computed using glider handicaps as appended to these rules and regulations. At the discretion of the competition organizers, an upper limit of permissible handicaps may be declared.

If not all gliders in the class are capable of carrying water ballast, each pilot who intends to carry water at any time during the contest shall declare so before the first contest day in which case the handicap will be adjusted for wing-loading by subtracting 0.02 from the published handicap for the duration of the contest.

1.5 Sailplanes of all classes, except World Class may carry water ballast if equipped to do so. However the

contest organizer may declare a "no water contest" for any or all classes. The Competition Director (CD) may declare a "no water day" for any and all classes and any day of the contest.

1.6 The aerodynamic configuration of a sailplane may be altered during a competition through the addition or removal of minor components as long as the class of the sailplane as defined by these rules is not affected. The substitution of entire assemblies such as a wing is not permitted. If the configuration of a sailplane in a handicapped class is altered in such a way that the handicap is affected according to Appendix A, the handicap factor for the configuration of the highest performance will be applied for the duration of the competition.

1.7 A pilot may enter and fly a sailplane in a non-handicapped class higher than its FAI class and compete, without any handicapping, with the competitors in that higher class. For purposes of determining valid entries, the non-handicapped class hierarchy is: Open, 18 meter, 15 meter, Standard, and World.

A pilot may enter and fly a Club Class sailplane in the Handicapped FAI Class however no allowance in task setting will be made for the performance of the Club Class sailplane.

1.8 A two-seat sailplane may be flown in the Handicapped FAI Class, Club Class or the Open Class, according to its handicap. If flown with two pilots, one must be designated as the pilot-in-command. The pilot-in-command must satisfy the entry requirements of the competition. The second pilot may be exchanged. However, there must be the same number of persons on board on every competition flight.

1.9 Motorgliders may be flown in the appropriate class provided that the pilot demonstrates, to the satisfaction of the CD, that the time and location of any engine start

will be recorded by the flight data recorder or that the engine has not been, and cannot be operated for the entire duration of the flight.

1.10 Based safety considerations and taking into account available resources, the competition organizer may limit the number of competitors in any individual class or the competition as a whole. Contestant priority shall be established by the sequence of entries received.

2 PILOT QUALIFICATIONS

2.1 In order to enter a Canadian National Soaring Competition, a pilot must hold a valid glider pilot's license, be a full flying member of SAC, or a member of the national soaring association in his country of residence and meet the following minimum experience requirements:

- a. have participated, for the full duration, in a previous Canadian National Soaring Competition,
- b. have participated, for the full duration, in a provincial soaring competition sanctioned by the appropriate provincial gliding organization,
- c. have participated in one or more other competitions, and upon special application, subject to the decision of the Competition Manager.

2.2 Before the competition starts, verification of pilot qualifications shall be done as follows:

- a. The appropriate qualification is to be recorded on the pilot's entry form and certified by the pilot's signature. Any doubtful claim of experience shall be subject to the decision of the Competition Manager.
- b. The pilot shall certify by his/her signature that (s)he has a valid pilot's license and medical, required to fly the aircraft entered into the competition. The competition organizers may inspect the pilot's license and other related documents.
- c. The pilot shall certify by his signature that the aircraft entered into the competition has insurance coverage, for the duration of the competition, against public liability and property damage risk to a limit announced prior to registration for the competition. The competition organizers may inspect the insurance certificate.

2.3 Canadian Pilots: Contestants who are Canadian citizens or have Permanent Resident Status in Canada.

2.4 Guest Pilots: Foreign pilots and other pilots who wish to fly as guests (i.e. pilots who have a conflict of interest or pilots who cannot stay for the duration of the competition).

- a. Guest Pilots are expected to comply with all rules and are specifically prohibited from providing aid to other pilots during flight.
- b. The performance of Guest Pilots shall not influence the scoring or ranking of regular entrants.

3 NATIONAL CHAMPIONS

3.1 A National Champion may be declared in each class in which competition is held. The National Champion for a class will be the Canadian Pilot with the highest cumulative number of scoring points, in that class, at the end of the competition.

3.2 For a National Champion to be declared in a championship class, there must have been a minimum of four competition days for that class.

3.3 Team entries do not qualify for the title National Champion or seeding points.

3.4 For two-seat sailplane entries, only the pilot-in-command is eligible to be declared National Champion.

4 FLIGHT and GROUND EQUIPMENT

4.1 For each entry, proof must be shown that the sailplane possesses a valid Certificate of Airworthiness or Unrestricted Flight Permit valid in Canada, prior to any flight at the competition site.

4.2 The CD or his designate, may require the inspection of any or all aircraft documents prior to any flight at the competition site, to demonstrate compliance with the requirements for operation of an aircraft in Canada.

4.3 The CD, or his designate, may require a check on the all-up weight, and/or the weight-and-balance, of any sailplane entered in the competition, to demonstrate conformance with the appropriate aircraft documentation. Such checks may be made at any time during the competition.

4.4 During each flight of the competition, the pilot or pilots must be properly secured in the sailplane with a lap belt and shoulder harness, and must wear a serviceable parachute.

4.5 All navigational aids are allowed; however, the use of gyroscopic flying instruments is prohibited for any flight of the competition. Any such instrument must be removed from the sailplane or made inoperable for the duration of the competition to the satisfaction of the CD.

4.6 If a sailplane is damaged during the competition, it may be repaired subject to Transport Canada regulations.

Components other than a complete wing or fuselage may be replaced rather than repaired. If the damage is incurred, to the satisfaction of the CD, through no fault of the pilot, then the entire sailplane may be replaced with one of identical make and model.

5 DATES and DURATION

5.1 A Canadian National Soaring Competition will be ten consecutive calendar days in duration, immediately preceded by two practice days. Each day shall be considered a competition day unless it is declared a rest day or it is cancelled because of weather conditions or because of class performance (see 13.2).

5.2 The dates for a competition shall be announced as early as practicable before the event. Under no circumstances will the competition be extended beyond the ten calendar days specified by the Competition Manager.

6 ADMINISTRATION

6.1 A Competition Manager shall be appointed by the organization that hosts the competition. The Competition Manager shall:

- a. appoint a Competition Director (CD) who shall be the principal official with overall responsibility for the conduct of the competition over its duration.
- b. appoint an official Scorer and provide the means to do the scoring. The Scorer shall not be a competitor.
- c. in consultation with the CD, appoint various other officials, such as the Field Manager and Chief Tow Pilot, as may be required to assist the CD.
- d. with assistance from the CD, submit a report to the Sporting committee of the Soaring Association of Canada within 30 days of the completion of the competition. This report shall include as a minimum: the complete entry list, the complete scoring, a financial statement, and any comments that may be considered relevant to this and future competition.

6.2 The Competition Director shall:

- a. convene a mandatory meeting of all competitors prior to the first competition launch to elect a Task Committee and discuss the competition operating procedures and contest safety. Any discussion of the rules and regulations shall be for the purpose of clarification only.
- b. convene a meeting of all competitors before the tasks on each competition day. The selected tasks shall be given to the competitors along with relevant information such as weather and operating procedures for the day.

- c. convene a pilots' meeting at any other time as deemed necessary.

7 TASK COMMITTEE

7.1 A competition Task Committee shall be formed from the CD, the contest meteorologist, and two competitors elected at the initial pilots' meeting.

7.2 The Task Committee members shall meet daily prior to the daily pilots' meeting to determine the flight task, if any, for the day (see section 13 for tasking details).

8 JURY

8.1 The competition organizer shall appoint, for the duration of the competition, a three member Jury consisting of glider pilots who are not competing in this competition.

8.2 Each member of the Jury shall be knowledgeable and experienced in Canadian gliding competitions. Ideal candidates are experienced competition pilots who are not competing and past CDs and Contest Managers.

8.3 At least one member of the Jury has to be able to be present at the contest site, when required, for the duration of the competition. The members of the Jury, not present at the contest site have to be available by telephone for Jury meetings on 12 hrs notice. On the last day of the competition, all Jury members have to be on stand-by for expeditious rulings on protests.

8.4 Each member of the Jury shall be neutral and independent of the CD's decisions. None of the jurors shall have a foreseeable conflict of interest regarding this competition.

8.5 The Jury is the final authority for the administration of these Rules and Regulations and for decisions relating to disciplinary action. The Jury shall convene to make a ruling at the request of the CD, or as a result of a properly lodged protest. The Jury shall then:

- a. thoroughly investigate and assemble all relevant facts concerning matters for its consideration,
- b. rule on the interpretation of these Rules and Regulations and other matters,
- c. rule on the application or adjustment of penalties (such as loss of points, suspension, or disqualification from the competition), that may arise.

8.6 Rulings of the Jury shall be final.

9 PENALTIES

9.1 The CD may assess a penalty against a competitor for any act or omission that is contrary to the sportsman-like conduct of the competition, that constitutes an unsafe operating practice, or that is a violation of announced operating procedures or the Canadian Aviation Regulations (CARs).

9.2 The penalty may be the deduction of a number of points from the competitor's score, suspension of the competitor for a specified period from the competition, or disqualification from the competition.

9.3 On competition days, penalty points will be deducted from the daily score. After application of the penalty, the resulting daily score shall not be less than zero. Only in exceptional cases, such as safety violations or severe disciplinary infractions will the penalty be applied against the cumulative score if the daily score is insufficient to carry the penalty.

9.4 It is intended that this competition shall be decided by the individual effort of the competitor. Undue assistance from persons on the ground or in the air or from portable weather devices shall be considered unsportsmanlike conduct, and a penalty may be assessed.

9.5 Penalties are at the discretion of the CD. A guide of appropriate penalties is provided in Appendix B

9.6 A competitor assessed a penalty may appeal any aspect of the penalty by lodging a protest as described in Section 10.

10 PROTESTS

10.1 A competitor may lodge a protest with the Jury for any decision taken by a competition official, or for any act or omission by any person associated with the competition.

10.2 For a protest to be sustained there must be clear evidence that a provision of these Rules was not followed.

10.3 A protest must be made in writing, signed by the protesting competitor and submitted to the CD within 24 hrs after the event being protested. Only in exceptional circumstances will protests be considered beyond the 24 hr limit.

10.4 For protests concerning scoring, the 24 hour period commences with the posting of the version of the scores being protested.

11 SAFETY & OPERATING REGULATIONS

11.1 A contest shall be run with the greatest emphasis on safety. No phase of the operation of the contest or interest in competition can be allowed to compromise safety. Each competitor, crew member and Contest Official must carry out his responsibility to prevent unsafe practice. The Contest Manager has the primary responsibility for the preparation of a safe plan of operation to be carried out by the Operations Director (CD), and other contest staff.

11.2 A Safety Briefing will be conducted at each daily pilots' meeting. Suggested briefing subjects are start procedures, gaggle flying, maximum speeds, finish techniques, landing and rollout cautions, off-airport landings and local concerns, dehydration, hypoxia.

11.3 All in-flight judgments affecting safety, including any decision to fly over rough terrain or hazardous areas, and evaluation of the safety of any potential landing site, are the sole responsibility of the pilot in command.

11.4 Competitors must comply with Canadian Aviation Regulations applicable to non-transponder-equipped aircraft operating under Visual Flight Rules.

11.5 All competitors must adhere to the operating procedures (ie. circuit directions, signals, etc.) as announced and discussed by the CD at any of the pilots' meetings.

11.6 It is the responsibility of each competitor and crew to prepare the sailplane for flight, to position the sailplane in the assigned place, and to attach the towrope to the sailplane prior to takeoff.

11.7 If an aircraft may have suffered damage, the CD has the right to ask that it be examined by a qualified AME prior to further flight.

11.8 Competitors and crew shall carry out the launching of sailplanes in the manner prescribed at the pilots' meeting.

11.9 The direction of circling in a thermal shall be determined by the sailplane arriving first in the thermal. However, within a 10 kilometer radius of the competition site, all sailplanes shall circle in a left-handed direction.

11.10 The CD may declare a rest day if previous contest flying has created a potential fatigue problem for pilots.

11.11 Aerobatic maneuvers and demonstrations are prohibited unless authorized by the Competition Director.

11.12 During take-off and landing operations, all pilots and towpilots should monitor the contest frequency for information pertaining to flight safety.

11.13 Airspace

- a. Forbidden airspace includes Class A, Class B, Class C, Control Zones, Restricted or Prohibited airspace and airspace designated as forbidden by the contest organizer. Such airspace is forbidden at all times, except as specifically announced by the CD. The height of the sailplane in relation to forbidden airspace shall be the difference between a recorded fix and that of a fix recorded on the ground before take-off plus the elevation of the competition site.
- b. Tasks should be set to avoid flight through any airspace containing high-density traffic.

12 CONTROL POINTS

12.1 Control points include **Turnpoints** and **Start Points** and **Finish Points**. The final list of control points must be made available to the competitors not later than 30 days prior to the beginning of the competition. Thereafter the only changes permitted are deletions unless the competitors agree to the change unanimously.

12.2 Each control point shall be assigned a unique numeric ID and name. The location of each point shall be determined by its coordinates, referenced to the WGS84 datum. Coordinates of points that coincide with a ground feature shall be accurate to 200 feet or better.

12.3 Each **Start Point** shall have a specific control zone associated with it consisting of a cylinder of 5.0 kilometers radius centered on the start point coordinates. Only one start point per class and task shall be used. The CD may declare a maximum Start Height.

12.4 Each **Turnpoint** shall have a specific control zone associated with it (the **Turn Area**) consisting of a cylinder centered on the turnpoint coordinates. The standard cylinder radius is 2.0 km; this applies except when the CD declares a different radius as part of a **Turn Area Task**.

12.5 Each **Finish Point** shall have a specific control zone associated with it consisting of a cylinder (the **Finish Cylinder**) of a 2.0 kilometer radius centered on the finish point coordinates. The **Minimum Finish Height** shall be as announced by the CD, but at least 500 feet above the finish point. The finish point shall be located near the center of an airfield.

12.6 A competitor will be credited with reaching a start point, turnpoint, or finish point control zone if at least one position fix record is found to be within the control zone according to the software used by the organizers (satisfactory flight recorder evidence).

13 COMPETITION TASKS

13.1 On each day of the competition the Task Committee shall either set a task for each competing class or announce the cancellation of flying for the class. Tasks should make as full use of the available soaring weather as is practical. When feasible, tasks should be set so that the expected minimum completion time is not less than the Standard Task Time. Yet a task should be short enough that a competitor who starts as soon as the task opens and who achieves 75% of the expected winning speed is able to finish. A task should normally allow a maximum possible distance at least 130% of that achievable in the designated minimum time at the expected winning speed.

The same task may be set for two or more classes. The Task Committee may also set alternative tasks for a class or later amend any of the announced tasks. The final task selection for each class shall be announced at least 15 minutes before starting is permitted for that class. Changes in task selection, cancellation or amendments to tasks must be acknowledged by all affected competitors, in writing if prior to take-off, or by radio roll call after take-off has begun for the affected class. The Task Committee shall use every effort to make decisions regarding final tasks as early as possible.

13.2 Task Parameters:

- Standard Minimum Task Distance: 80 km
- Standard Minimum Task Time: 3.0 hours
- Standard Task Time: 4.0 hours
- Minimum length of first leg: 10 km
- Minimum length of subsequent task legs: 5 Km
- Maximum number of task legs: 11

The Task Committee may set the following tasks as defined below:

Turn Area Task (TAT)
Modified Assigned Task (MAT)

13.3 Turn Area Task (TAT)

The objective of this task is to achieve the best speed over a course consisting of start, one or more Turn Areas, in the specified order, with a finish at the competition site. A competitor has to finish the task in order to receive a speed score.

A Turn Area is a cylinder centered on a turnpoint. The CD shall designate a **minimum flight time**, a sequence of one or more Turn Areas and a radius for each which shall be an integral number of kilometres with a minimum of 2 km. The perimeters of successive Turn Areas shall be no closer than the **minimum leg length**.

13.4 Modified Assigned Task (MAT)

The objective of this task is to achieve the best speed over a course of one or more turnpoints with a finish at the competition site. A competitor has to finish the task in order to receive a speed score.

The CD shall designate a **minimum flight time** and a sequence of up to 10 turnpoints. Designated turnpoints must be attempted in the designated sequence, but a competitor may elect to finish after any turnpoint in the sequence. Successive turnpoints shall be no closer than the **minimum leg length**.

A competitor who achieves all designated turnpoints may elect to fly to additional turnpoints. Such pilot-selected turnpoints must comply with any restrictions the CD has imposed and no turnpoint may be repeated unless at least two intervening turnpoints are claimed (Start and Finish are not turnpoints).

The CD may:

- restrict the maximum number of turnpoints to a number less than 10;
- restrict the number of times any particular turnpoint may be claimed;
- The CD may designate a final turnpoint that all competitors must use immediately prior to a finish. This final turnpoint shall be no further than 10 km from the perimeter of the finish cylinder.

Note: It is not the intent to use the feature of additional turnpoints routinely. The CD should plan the distance of the assigned part of the MAT in such a way that it is unlikely to be completed in less than the **designated minimum time**.

13.5 A task shall be controlled by flight recorder evidence assisted by ground observation (normally used only for observing finishes and landings as an additional means of flight verification).

13.6 A start cylinder or a Turn Area used with a Turn Area Task may overlap forbidden airspace. Such overlap does not alter a competitor's responsibility to remain clear of the forbidden airspace.

13.7 Minimum Task - The minimum handicapped distance of a task for which a finish will be awarded is the Standard Minimum Task Distance.

13.8 A day for which no task has been set or for which all tasks have been cancelled or which is not a valid competition day (according to 11.1.3) for a given class becomes a rest day for that class. Rest days may also be declared by the CD for any class at any time during the competition for reasons such as landings more than 300 kilometres away or general pilot fatigue.

14 FLIGHT RECORDER EVIDENCE

14.1 A competitor will be scored for a particular task if he submits satisfactory flight recorder evidence supported, if necessary, by ground observation.

14.2 Flight data submitted for the purpose of scoring become part of the public domain.

14.3 A flight recorder is, for the purposes of these rules, an electronic device that records successive position fixes from a GNSS receiver. The recorder may have an integral receiver or it may be attached to a separate external receiver.

14.4 Any of the flight recorders approved by the FAI may be used.

14.5 The CD may allow the use of specific non-FAI approved flight recorder units that meet the following additional requirements:

- a. Each flight recorder must have a built-in, non-changeable, means of unique identification (ID) both electronically and visually. The same ID must also appear in the first record of the IGC formatted file that is retrieved from the flight recorder.
- b. The flight recorder must record position fixes comprising time, latitude, and longitude. For devices that record the NMEA output data from a GNSS receiver, this information shall be derived from the GGA and RMC NMEA v2 standard sentences.
- c. The recorder must have a demonstrable means of being reset (ie. erasing all stored data) after installation in the glider.

14.6 Each competitor must provide the contest organization with the serial number of the flight recorder and that of any back-up recorder.

The unique identification number of an acceptable flight recorder shall be registered to each competitor and a registration list maintained by the CD. Flight recorders (ie. registered numbers) cannot be exchanged after the announced take-off time for the first task in any class. A flight recorder may be replaced at any time, due to malfunction, with a unit that has not previously been registered to any competitor.

14.7 The flight recorder must be installed in the sailplane such that the recorded data cannot be changed by the competitor during flight. The only permitted connections to the flight recorder are:

- a. an external antenna cable,
- b. an external power supply cable,

- c. a data input cable if the recorder requires an external GNSS receiver,
- d. a data output cable (if provided) for monitoring the flight,
- e. a control cable for activating an event recording feature.

(One or more of these cables may be physically combined into one cable).

14.8 Flight recorders shall use position fix intervals no longer than 15 seconds in order to verify continuity of the flight. It is the responsibility of the competitor to ensure that there is a sufficient number of position fixes to permit being credited with a start, turnpoint, or finish. (Near control zones, an interval of 4 seconds or less is recommended for this reason.)

The CD at his discretion may accept a discontinuous flight log if the data show that the required control points were achieved correctly and possible airspace violation is not a factor. In case of a landing away from the contest site which is not recorded on the flight file, confirmation of the landing site requires the name, signature, and telephone number of one impartial witness (not pilot's family or own crew) on the Landing Card. For motorized sailplanes, if a flight log shows no fixes for a period longer than one minute, the flight shall be scored as if the engine had been used.

14.9 The installed flight recorder may be inspected and sealed by the CD to demonstrate to his satisfaction that the recorded data cannot be directly accessed before, during, or after a flight except as required after a flight to retrieve the data.

14.10 If the flight recorder is removed from the sailplane for the purpose of retrieving the data, or for any other reason, the CD may require a new inspection and resealing after it is reinstalled.

14.11 The CD or his designated official may at any time directly supervise the retrieval and conversion of flight recorder data. The competition organizers shall make every effort to provide the hardware and software to retrieve the data from the more common types of flight recorders. For other types of flight recorder, the competitor shall be responsible for making sure the hardware and software is available.

14.12 Flight recorder data files submitted as evidence shall contain only one flight and be on a data medium acceptable to the contest organizer in the form of an IGC formatted text file that can be read by a computer with the Windows operating system.

14.13 In order to expedite scoring, flight recorder data shall be submitted within 90 minutes after landing at the competition site or as soon as practical after landing at a place other than the competition site.

14.14 The competitor must keep the data for a particular flight within the flight recorder until the CD gives approval for it to be cleared. The competitor may be required to resubmit the flight recorder evidence at any time before being cleared, if requested by the CD.

14.15 The CD may, at any time after giving approval for clearing data and before the next launch, reset or otherwise clear out the data in any non-FAI-approved flight recorder.

14.16 The CD, or a designated contest official, has sole custody of the flight recorder data files submitted as evidence.

14.17 The competition organizers will be responsible for computer facilities (including software) for the analysis of the flight recorder data files submitted as evidence.

15 DAILY TIMES

15.1 Grid Time - the time at which all sailplanes shall be on the launch grid. The CD will assign a grid time each day. This time should be at least one half hour before the time of the earliest expected first launch.

15.2 Launch Begins - as announced by the CD, but not sooner than 15 minutes after grid time or after a pilot's meeting at the grid.

15.3 Start Gate Opens for a class- at a time designated by the CD, about 15 minutes after the last competitor of this class who accepts his designated launch starts his takeoff roll.

The CD shall report the opening of the Start Gate for each class on the radio.

15.4 Launch Line Closes - three hours before sunset, unless extended by the CD.

15.5 Start Closes - 30 minutes before sunset at the competition site.

15.6 Finish Closes - 15 minutes before sunset at the competition site.

16 LAUNCHING

16.1 Launch facilities shall be provided capable of launching sailplanes continuously at an average interval of two minutes or less. These facilities shall be made

available during the period when any competitor may require a launch.

16.2 The CD shall see that an accurate log of all on-site take-offs and landings is kept. This shall include at least the time of take-off or landing and the aircraft registration or competition letters.

16.3 Each competitor must be offered at least one opportunity to launch each flying day, but otherwise will be permitted as many launches as desired.

16.4 All launches shall be to the same height and at a common release area, both designated by the Competition Director.

16.5 The CD shall provide a designated order of launch for all the sailplanes in each class. The initial order shall be chosen at random for use on the first flying day. Positions for subsequent days will be determined by placing the front 20% of the previous competition day's list at the back of the grid, for each class. Grid lists for all subsequent competition days will be made available no later than the second daily pilots' meeting.

16.6 The CD may ask a competitor, preferably from the front of the launch order to act as a "sniffer". However, the competitor may refuse such a request without being subject to sanction.

16.7 Normally the classes will be launched in separate groups in the sequence determined by the CD for each flying day. The CD may also, at his discretion, declare a combined launch for all classes.

16.8 A competitor may decline an opportunity for launch on any flying day and delay until a later time, which shall be no earlier than the last position in the launch order for that competitor's class.

16.9 If a competitor requires a launch subsequent to his first launch on a flying day it shall be from the last position of what remains in the launch order in the class currently being launched. Priority for these launches shall be established according to the time at which the competitors landed at the competition site or declined a launch.

16.10 A failed takeoff or a failure of the towplane resulting in jettisoning or premature release of a sailplane shall not count as an official launch, even if the sailplane lands away from the competition site. The competitor must report to the launch point without delay.

16.11 Except for 16.10, subsequent launches are not permitted if the competitor lands at a site other than the competition site. In the interest of safety, the competition

site may be defined by the CD to include one or more nearby fields.

16.12 Motorgliders equipped with engine recording devices may self-launch at the discretion of the CD, within their assigned launch sequence. The responsibility for the decision to self-launch lies with the pilot.

Self-launching sailplanes shall follow procedures and a flight path as specified by the CD. These shall be chosen to maximize safety (which includes ensuring adequate separation from aerotow launches) and to minimize competitive imbalance by keeping all gliders in substantially the same conditions of weather and lift.

Motors must be shut down no higher than the altitude specified by the CD as part of the self-launch procedure. This altitude shall normally be 800ft higher than the aerotow release altitude. The place designated for shut-down shall allow any motorized sailplane unable to stow its engine to make a safe, unpowered return to the home field. Within 10 minutes after motor shut-down, self-launching sailplanes must make their way to a designated position close to the normal aerotow release area, at an altitude no higher than normal aerotow release height. The flight log must show that the climb from this position was achieved in normal lift, and not as the result of a pull up from high speed.

Competitors who wish to re-launch must land at the home field without the use of power. They must launch in the sequence as in 16.9.

Except for self-launching, any use of the motor ends a pilot's competition flying for the day.

17 STARTING A TASK

17.1 The CD shall not declare the Start open unless every competitor has a chance for a fair start.

17.2 A competitor will be credited with a valid start under the following conditions:

- a. The start must be open for the class of the competing sailplane,
- b. The flight recorder evidence is satisfactory.

17.3 A start occurs each time a sailplane exits a Start Cylinder. At least one fix must lie within the cylinder. The following shall be determined:

- Start Fix - the latest fix within the Start Cylinder.
- Start Time - the interpolated time of a competitor's latest exit from the Start Cylinder.

For height limited Start Cylinders the competitor shall maintain a height below the maximum start height and an indicated airspeed below 100 kts for two minutes before starting.

A start through the top of the cylinder is a valid start.

17.4 A competitor may make as many starts as desired.

17.5 The CD may require competitors to report their start times by radio within a specified time interval after the start.

18 FINISHING

18.1. Communications:

When 10 km from the finish point, the competitor shall transmit "[Contest ID] ten km out."

When a finish could come from more than one direction, radio calls shall include the direction from which the competitor is finishing.

Competitors are encouraged to make additional radio calls when they feel these increase safety, but to avoid unnecessary radio chatter.

During finishes, contest officials may provide information concerning the runway in use and the estimated wind direction and velocity. They will not be responsible for giving traffic control information.

Competitors must pay particular attention to safety during the process of finishing, landing, and rolling to a stop. A competitor whose finish, pattern, landing, or rollout is deemed unsafe by the CD is subject to a penalty for unsafe operation.

18.2 A competitor will be credited with a valid finish under the following conditions:

- a. The sailplane enters the finish cylinder from the direction specified for that task
- b. and the flight recorder evidence is satisfactory.

Penalties shall be applied for finishing below the **Minimum Finish Height**. The finish height shall be the difference between a recorded fix and that of a fix recorded on the ground. The Scorer shall use the more favorable of a pre-takeoff or post-landing fix.

18.3 Determining finish time:

At least one fix must lie within the finish cylinder. The finish time is taken as the interpolated time the sailplane first entered the Finish Cylinder.

- b. In case of unsatisfactory flight recorder evidence, the finish time shall be the time when the sailplane was observed to have come to a stop after landing within the boundaries of the airfield at the center of the finish cylinder.

18.4 The task may be attempted again provided a new valid start is made.

19 LANDING & RETRIEVING

19.1 The competition organizers shall provide each competitor, on each task day, with a landing card. This

card shall provide space for, and must be filled in with, the pilot's competition letters, the date, the turnpoints claimed, and the competitor's signature. All scoring shall be based on the claims made on this landing card. Note that a competitor may or may not wish to claim every turnpoint reached according to the flight recording.

19.2 If a landing is made prior to a valid finish and at a place other than the competition site, the competitor shall also record the landing time and coordinates of the landing place on the landing card, to at least the nearest tenth of a minute of latitude and longitude as well as the intended next turnpoint.

19.3 A sailplane shall be retrieved by road following a landing away from the competition site however, aerotow retrieves are also permitted at the discretion of the CD. Pilots of sailplanes capable of self-launch may elect to self-retrieve.

19.4 The competitor shall submit the landing card, along with the flight recorder evidence, to the designated competition official. This shall be done as soon as possible after landing or returning to the competition site following a retrieve.

19.5 The coordinates of the flight recording position fix at the time the sailplane comes to a rest shall be designated as the landing coordinates. If this fix is within the boundaries of an airfield, the published coordinates of the airfield will be used.

19.6 The coordinates of the flight recorder position fix on the leg being attempted immediately prior to landing, and which are closest to the next Turn Area or finish cylinder for that leg, shall be designated as the equivalent-to-landing coordinates. If the distance from this fix to an airfield where the landing occurred is less than 1.0 km the published coordinates of the airfield will be used.

19.7 For scoring purposes, either the landing coordinates, or the equivalent-to-landing coordinates, will be used to determine the **Landing Point**, and the associated time of the flight recorder fix shall be used to determine the landing time, whichever provides the greater achieved distance.

19.8 For scoring purposes, motorgliders will be scored as though they had landed at the time and at the coordinates where an engine start occurred. The competitor shall return to the competition site without attempting to proceed further on task; failure to comply can be considered unsportsmanlike conduct.

19.9 Safety Finish:

The Safety Finish area is a cylinder centered on the finish point with a radius of up to 20 kilometers. If weather

conditions warrant, the CD may activate the Safety Finish by a radio announcement on the contest frequency.

If the Safety Finish is active, a competitor may claim a finish by obtaining one fix within the Safety Finish cylinder; the altitude of the fix must be such that the slope to the finish point is not less than 100 feet per kilometer plus 300 feet safety altitude. The Safety Finish must be claimed on the Landing Card.

After a Safety Finish there is no requirement to return to the home field; a competitor may elect to land at any location or to remain flying.

The competitor's scored finish time is taken as the time of the claimed fix plus a time adjustment of 30 seconds per kilometer for the distance from the fix to the periphery of the standard 2 km finish cylinder.

The CD may de-activate the Safety Finish. At least 5 minutes notice of the time of de-activation shall be transmitted on the contest frequency.

20 CALCULATION OF SCORES AND RESULTS

20.1 General

Each flying day, each competitor shall be awarded points based on performance relative to the best flight of the day in that class. Competitors' cumulative scores shall be the sum of the daily whole numbers.

20.2 Scoring

The scores shall be calculated according to section 11 of the US National Sport- Class Competition Rules, using Winscore scoring software. These rules and software may be updated from time to time. The version which is current for the year of the competition will be used. If there is a conflict between a provision of section 11 and any provision in this document, the relevant provision of this document will prevail.

20.3 Definition of Contestant

For the purpose of scoring under section 11 of the US National Sport- Class Competition Rules, **Contestant** for a competition day is defined as a regular entrant who takes a competition launch. **Note: this overrides 11.1.1**

20.4 Handicap Factors

Handicap Factors are according to the Appendix A which conforms to the most recent SSA handicap list available. The owners of a glider type or model which is not covered by the SSA handicap list, may apply to the SAC Sporting Committee to determine Handicap Factor. This process shall not take longer than 45 days.

For non-handicapped classes, a universal factor of 1.00 shall be applied.

20.5 Cross Reference List

Section 11 references a number of other sections of the US National Sport- Class Competition Rules. Only section 11 applies to these rules. The list below provides

cross references to the relevant sections in the Canadian rules.

- 5.6.1 : see Canadian rules, section 12
- 10.3.1.1 : see Canadian rules, section 13.2
- 10.5.1.5 : see Canadian rules, section 21
- 10.5.3 : see Canadian rules, section 12.4
- 10.5.1.3 : see Canadian rules, section 19.1
- 10.5.1.5 : see Canadian rules, section 20.9
- 10.8 : see Canadian rules, section 17
- 10.8.5 : see Canadian rules, section 17.2
- 10.8.5.3 : see Canadian rules, section 17.3
- 10.8.6 : see Canadian rules, section 13.2
- 10.10.3 : see Canadian rules, section 19.9
- 11.6.1.2.2. see Canadian rules, section 1.4
- 12.2.5.5 : see penalties, Appendix B

20.6 Points will not be awarded to any competitor until flight recorder evidence and a landing card are submitted.

20.7 The points awarded to any competitor may be adjusted for penalties for incorrect start point, turnpoint or finish procedures, or for any other assessment as determined by the CD.

20.8 The CD shall authorize the flight recorders to be cleared after all the evidence has been satisfactorily processed.

20.9 The Scorer shall publish daily results and flight documentation available to entrants no later than the next daily pilot meeting.

21 FINAL RESULTS

21.1 The final results shall be posted after all ground based or flight recorder evidence has been assessed, turnpoints have been validated and all protests have been resolved.

21.2 National Champions, the best overall pilot and other finishing positions shall be declared, and awards and trophies shall be given only after all the final results have been posted.

Appendix A

<http://www.ssa.org/myhome.asp?mbr=6242029070>

The SAC Handicaps conform to the most recent SSA handicap list available from

Appendix B – List of Standard Penalties

Type of Offence	First Offence	Subsequent Offence (after warning)	Max Penalty
Weight Penalty Overweight by W kilograms:	W * 2 pts	n * W * 2 pts	n * W * 2 pts
Wrong, late or missing information			
Documentation not complete	No launch	No launch	No launch
Late or missing notification of start time	Warning	10 pts	25 pts
Declared start time differing from the real time	Warning	10 pts	25 pts
Incorrect FR adjustment (Time interval between fixes > 15 sec)	Warning	10 pts	25 pts
Late delivery of FR, landing card	Warning	10 pts	25 pts
Late delivery of backup documentation	Warning	10 pts	25 pts
Failure to submit flight documentation	Contest penalty 100 pts		
Incorrect Start			
Valid Start at Incorrect Start Point	100 pts	100 pts	100 pts
Start cylinder missed by 0.50 km or less	50 pts	100 pts	200 pts
Start cylinder missed by more than 0.50 km	No start	No start	No start
Maximum start height exceeded:	$(\text{Actual start height} - \text{max start height} - 100)/2$		
Incorrect Rounding of Turnpoints			
Turn Area missed by 0.50 km or less	50 pts	100 pts	200 pts
Turn Area missed by more than 0.50 km	No credit f. TP	No credit f. TP	No credit
Low Finish	$5 + (\text{Finish Floor height} - \text{actual finish height})/5$		
Dangerous or hazardous flying			
Cloud flying	100 pts	Day Disqual.	Disqualification
Circling in wrong direction	Warning	(n-1) * 25 pts	Disqualification
Towing: early or late release	Warning	(n-1) * 25 pts	Disqualification
Motorglider not complying with self launch proc.	50 pts + maximum possible advantage achieved in the estimation of the CD		
Landing: incorrect landing lane or direction	Warning (n-1) * 25 pts	Disqualification	
Flying above the absolute altitude < 100m	1 pt/m	n pts/m.	Day Disqual.
Flying above the absolute altitude > 100m	Day Disqual.	Day Disqual.	Disqualification
Entering restricted or closed airspace	1 pt per sec	n pts per sec	Disqualification
Landing after legal daylight	10 pts/min	Day Disqual.	Disqualification

Note: the above list is a guideline. The Competition Director may apply different penalties at his discretion.

Other violations: At the Competition Director's discretion