

SSA RULES COMMITTEE

2014/2015 COMPETITION RULES - PROPOSED CHANGES

This document contains the text of rules changes recommended by the SSA Rules Committee for implementation in 2014 and [an announcement of intent to change a rule in 2015](#). The deadline for comments to the Rules Committee is Saturday January 18, 2014.

5-Dec-13	Working Draft for X Review
5-Jan-14	Version 1.0 to RC for Review and Corrections – Item 16 still outstanding
7-Jan-14	Version 1.1 incorporates Item 16, edits to Item 1, minor edit to Item 9
8-Jan-14	Version 1.1 published for public comment
21-Jan-14	Version 1.2 Chair proposed changes following public comments
29-Jan-14	Version 1.3 Final edits to Items 4, 6, 7. Highlight shows changes vs. V1.1

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When appropriate, letters in brackets indicates the “level” of a rule, as follows:

- N – National FAI class
- R – Regional FAI class
- S – National Sport class
- X – Regional Sport class
- RX – Regional FAI and Regional Sport class
- A – indicates an addition to the rules appendix, not the rules themselves

Note that R and S “inherit” rules from N, and X in turn inherits from S.

- [Added language is underlined.](#)
- ~~Deleted language is struck through.~~
- Unchanged language is without decoration

1. Notice of 2015 Proposed Change: Club Class Nationals to be Separate Contest from Sports Class Nationals

Starting 2015, have a separate Club Class Nationals as a racing class, at a separate site and time from Sports Nationals, preferably on opposite ends of the country. The plan is to restrict entries to gliders with a handicap equal to or higher (i.e. lower performance) than the current US Team Club Class list. Gliders below Club Class (as defined by the US Team criteria for Club Class team selection) performance can fly but get no more handicap than bottom of Club. Tasking will be for Club, regardless of any lower performance gliders that enter. In 2015 Sports becomes "Modern" and "Low Performance." See the 2013 Rules Committee Meeting Minutes for additional information.

This requires agreement to change the 2015 contest schedule and identification of a sponsor/site/time.

2. Restricted Airspace: CD Discretion to Allow Overflight of Designated Restricted Airspace

This change gives the CD discretion to specify that certain Restricted airspace can be overflown without penalty. This is intended to simplify dealing with areas whose sizes are small and ceilings are very far below the typical operating altitude for the contest flights.

- 5.6.2.1 Closed airspace includes Class A, Class B, Class C, ~~Restricted and~~ Prohibited areas, airspace outside US territory, and other airspace in which VFR flight by non-transponder-equipped aircraft is not allowed or would require a specific clearance. Any airspace that lies directly above such closed airspace is itself considered closed.
- 5.6.2.2 ~~Any airspace that lies directly above closed airspace is itself considered closed.~~ Restricted areas (including areas covered by a Temporary Flight Restriction) are also closed. All airspace directly above such areas is itself closed, except in the case of designated areas for which the CD has specified an upper limit to the closed airspace (as an altitude MSL). This limit shall be set sufficiently above the actual top of the underlying Restricted area as to make inadvertent descent into that area unlikely. Descent below the CD-designated upper limit incurs a Serious Airspace Penalty (Rule 12.2.5.6.2)
- [A]5.6.2.2 This rule allows the CD to designate and permit overflight of Restricted areas (which includes TFRs, but no other types of airspace). The specified top of such an airspace area must be well above the actual top of the underlying Restricted area, to make it unlikely that any pilot will descend into the Restricted area, even if unexpected sink is encountered. An altitude that yields a glide of no less than 250 feet per mile from anywhere above the Restricted area to its outermost edge is recommended
- 10.12.5 Gaps in a Flight Log longer than one minute shall be interpreted unfavorably to the pilot. During each such gap:
- the closest horizontal approach to or from the nearest closed airspace shall be calculated assuming a speed of 100 mph
 - if in the judgment of the CD there was any realistic possibility of a vertical airspace violation, the closest vertical approach to the nearest closed airspace shall be calculated based on a ~~climb-rate~~ vertical speed of 1000 feet per minute

3. Sports Class: Minimum Achieved Distance is Handicapped Distance

This corrects an error in the wording of the rule and clarifies that Handicapped Distance is to be used here.

[S]11.2.3.5 Scored Distance is zero if:

[S]11.2.3.5.1 The pilot has no valid start time (Rule 10.8).

[S]11.2.3.5.2 The pilot lands at the home field (or the pilot of a motorized sailplane used the power unit after launch) and ~~the distance~~ [Handicapped Distance \(Rule 11.6.2\)](#) calculated above is less than half the Standard Minimum Task Distance.

4. Regionals: Grand Prix Style Start Allowed in Regional Contests

This provides an option for a Grand Prix style start in Regional Contests

[\[R\]10.8.5.7](#) [At the CD's option, a task may include a Latest Start Time \(LST\). The intention to use this shall be announced on the task sheet; the actual time shall be announced when the task opening time is set. If announced, each pilot task that includes a valid start time later than the LST is evaluated as if the start happened at the LST.](#)

[\[R\]10.8.5.7.1](#) [The intent to use the provisions of this rule, in which form \(tight vs. loose LST interval, every day or only on some days\), and in which classes, should be announced by the contest organization before the preferential entry deadline. A class formed after the preferential entry deadline may use LST if all pilots registered in that class concur.](#)

[\[A\]10.8.5.7](#) [The Latest Start Time \(LST\) option is useful for a contest that incorporates "Grand Prix" style racing. The effect is to get all pilots started in a narrow window of time. It's important that the intention to use this be announced to all pilots. It must be noted on the Task Sheet, and should certainly be briefed at a pilot meeting.](#)

[This option has the potential to produce crowding at the start, so it should be used carefully, and probably not with a class that includes many gliders. Because this rule is new, careful briefing on its operation is desirable.](#)

[The LST can be the same as the Task-opening time, which would motivate all pilots to start simultaneously.](#)

[The LST can be later than the Task-opening time; pilots will then receive starts as usual after task opening time and before the last start time. The LST may be half an hour, an hour, or even more after start opening time per these rules.](#)

[Note that starts after LST are also valid - they are scored with the LST rather than the actual start time. Pilots who have trouble getting up or who must relight may still fly the course after the LST.](#)

5. Motorglider Engine Run Procedure Prior to Start Revised

This section has been rewritten for clarity and to increase the safety margin of the procedure for motorgliders that must descend to air-start their engine after aerotow.

- ~~10.6.3 Motorized sailplane engine use procedures~~
- ~~When approved by contest organizers and the CD, pilots of motorized sailplanes may elect to use their engines in accordance with the following rules:~~
- ~~10.6.3.1 The final responsibility for any decision to use the engine for self-launch or any other time lies with the pilot.~~
- ~~10.6.3.2 Pilots 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 other sailplanes) and to minimize competitive imbalance by keeping all sailplanes in substantially the same conditions of weather and lift.~~
- ~~10.6.3.3 Pilots who wish to run their engines after aero tow shall begin to do so within 2 minutes of tow release; the engine run shall not exceed 5 minutes.~~
- ~~10.6.3.4 Motors must be shut down no higher than an altitude specified by the CD, which shall normally be 800ft higher than the aerotow release altitude. The designated procedure shall allow any motorized sailplane unable to start or stow its engine to make a safe unpowered return to the home field.~~
- ~~10.6.3.5 Within 10 minutes after motor shut-down, motorized sailplanes must be at a designated position close to the normal aerotow release area and no higher than normal aerotow release height. The flight log must show that any climb from this position was achieved in normal lift, and not as the result of a pull-up from high speed.~~
- ~~10.6.3.6 Pilots of motorized sailplane launches found not to have complied with specified procedures will be penalized. The penalty (Rule 12.1.4.4) shall consist of a fixed minimum plus a number of points that in the estimation of the CD represents the maximum possible advantage obtained from the violation (but the total penalty shall not be less than the fixed minimum). Height violations normally incur a penalty of one point per foot.~~
- ~~10.6.3.7 Re-launching.~~
- ~~10.6.3.7.1 Pilots may land at the home field without the use of power and then re-launch in the sequence of the CD's auxiliary launch list (Rule 10.6.1.4).~~
- ~~10.6.3.7.2 Pilots in the air may start their power unit within 1 mile of the home airfield, then follow the launch procedures above. A pilot who makes use of this option is not eligible for a start time earlier than 15 minutes after engine start; a start time earlier than 20 minutes after engine start incurs a penalty (Rule 12.1.4.10).~~
- ~~10.6.3.7.3 Whether or not it includes a landing, each re-launch counts towards the maximum number of launches allowed each day (Rule 10.6.2.3).~~
- ~~10.6.3.7.4 Any use of the power unit other than during the initial launch of the day must be noted on a Task Claim form submitted to the Scorer.~~
- ~~10.6.3.8 Except as provided here (Rule 10.6.3), any use of the power unit ends a pilot's competition flying for the day.~~

- 10.6.3 Motorized sailplane launch procedures
- When approved by contest organizers and the CD, pilots of motorized sailplanes may elect to use their engines, in accordance with the following rules.
- 10.6.3.1 General
- 10.6.3.1.1 The final responsibility for any decision to use an engine lies with the pilot.
- 10.6.3.1.2 Any use of the engine other than for self-launch (Rule 10.6.3.2) must be noted on a Task Claim form submitted to the Scorer.
- 10.6.3.1.2 When these procedures call for a descent, the flight log must show that the subsequent climb was achieved only in normal lift, and not as the result of a pull-up from high speed.
- 10.6.3.1.3 The penalty for violations of these procedures (Rule 12.1.4.4) shall consist of a fixed minimum plus a number of points that in the estimation of the CD represents the maximum possible advantage obtained from the violation. Height violations normally incur a penalty of one point per foot.
- 10.6.3.1.4 Any use of the engine not within 2 miles of the home airfield or of a location covered by the CD's self-launch procedures (Rule 10.6.3.2.1) ends a pilot's competition flying for the day.
- 10.6.3.2 Self-launch
- 10.6.3.2.1 Pilots 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 other sailplanes and allowing for a sailplane with engine problems to make a safe unpowered return to the home field) and to minimize competitive imbalance by keeping all sailplanes in substantially the same conditions of weather and lift.
- 10.6.3.2.2 Engines must be shut down no higher than an altitude specified by the CD, which shall normally be 800' higher than the aerotow release altitude.
- 10.6.3.2.3 Within 10 minutes after engine shut-down, self-launched sailplanes must be at a designated position close to the normal aerotow release area and no higher than normal aerotow release height.
- 10.6.3.3 After aerotow launch
- 10.6.3.3.1 Engines may be run for warm-up or to indicate proper operation of Flight Recorder engine run detection.
- 10.6.3.3.2 The engine run must commence within 15 minutes of tow release, within 2 miles of the home airfield, above 1000' AGL, and last less than 5 minutes.
- 10.6.3.3.3 Within 10 minutes after engine shut-down, the pilot must be at a position close to and no higher than where the engine was started.
- 10.6.3.4 Re-launch
- 10.6.3.4.1 Pilots may land at the home field without the use of power and then self-launch in the sequence of the CD's auxiliary launch list (Rule 10.6.1.4).
- 10.6.3.4.2 Pilots in the air may start their engine within 2 miles of the home airfield and above 1000' AGL, then follow the self-launch procedures of Rule 10.6.3.2. A pilot who makes use of this option is

not eligible for a start time until 15 minutes after engine start; a start time earlier than 20 minutes after engine start incurs a penalty (Rule 12.1.4.10).

10.6.3.4.3 Whether or not it includes a landing, each re-launch counts toward the maximum number of launches allowed each day (Rule 10.6.2.3).

6. Motorgliders Can Now Earn Airport Bonus

This allows a motorglider pilot to receive an airfield "landing" bonus for an engine start, provided it was clear that an eligible airfield was within easy reach.

10.10.3.4 ~~A pilot of a motorized sailplane receives no bonus for a landing that takes place after the use of the motor.~~ A pilot of a motorized sailplane who uses the motor before landing can be eligible for a bonus, under the following provisions:

10.10.3.4.1 The flight log shows that the motor was started within 2 miles of an eligible airfield (Rule 10.10.3.2) and at least 1000' above that airfield's elevation. Distance from airfield to be determined based on ~~airfield coordinates in the contest database (if included) and the FAA official airport coordinates~~ or by the CD, if appropriate if not in the contest database.

10.10.3.4.2 The bonus is claimed on a Task Claim form submitted to the Scorer.

7. CD Discretion to Change Scores after a Day Becomes Official

Errors discovered in the scoring, whether due to software or not, can be corrected by CD action even after the day has become official (but not after the contest has become official).

11.9.3.3 Other than to correct errors caused by incorrect scoring ~~software~~, no changes to scores are allowed after a day's Official status is declared. If changes to scores are authorized by the CD, then the status of the day reverts to Unofficial. However, no additional or revised flight documentation can be submitted.

11.2.2.7.2 ~~Unless prohibited by Rule 11.9.3.3~~ A subsequent Task Claim form will be accepted if it is received prior to a day's results being declared Official and if it results in a more accurate score.

8. Guidance Revised: Task Setting

Added cautions regarding minimum distance for handicapped classes and restated process.

- A10.3.1.2 Task-calling considerations for the CD
- General
- Select good (i.e. knowledgeable, fair and decisive) task advisors, and use them.
 - ~~Using~~ Use the best available weather ~~information and~~ sources; get weather updates as appropriate
 - Using the help of ~~the~~ weather forecasts and task advisors, ~~estimate~~:
 - Estimate the times at which soarable conditions will start and end
 - ~~The speed that the winner will achieve~~
 - ~~Be ready~~ Estimate the times when tasks are likely to ~~modify~~ open (depends on launch order, class size, launch efficiency, etc.)
 - From these estimates ~~as the day develops~~, calculate a maximum time on task (from task-opening time to the estimated end of the day)
 - ~~Using these estimates and the guidelines on task length of Rule 10.3.1~~
 - Estimate the speed that the winners will achieve
 - Select three tasks appropriate to the predicted conditions. At the pilots' meeting, name the longest of these as the primary task.
 - ~~The Aim for a~~ mix of tasks ~~should be~~, balanced across all task types.

- [Be ready to modify estimates – and to change tasks – in response to how the day develops.](#)
- Be ready to launch 30 minutes before the earliest possible start of the day.
- [If required](#), launch the sniffer as early as is practical. Launch the fleet as soon as the ~~sniffer indicates that~~ conditions are acceptable (see the comments for Rule 10.6.2.6, below).
- Understand the importance of an efficient launch. The ideal would be to get everyone into the air in 5 minutes. That isn't possible, but anything that makes the launch go more smoothly is welcome. The saving of even a few seconds per launch adds up.
- Make a point of consulting the task advisors between 15 and 10 minutes before the task opens, to verify that those in the air feel the contemplated task will be safe and fair.
- On difficult days, keep trying until it is really too late to get a fair task in. Listen principally to the weatherman, rather than pilots who may be complaining that they'd prefer to pack up their gliders and go swimming.
- Try to use the full day, not merely the best part of it. Inevitable, 60-90 minutes or more are lost to the launch and pre-start. Try to call tasks that make good use of the rest.
- Use distant turnpoints in good weather - save the nearby ones for the tough days. Visiting a variety of turnpoints tends to add interest to a contest.
- With Minimum-time tasks (TAT and MAT), inexperienced pilots especially should be made aware of the significance of the Standard Minimum Task Distance. A pilot who flies the minimum possible distance may not ~~have enough distance to~~ get credit for a finish. This is doubly important in Sport class, where the minimum distance to get credit for a finish depends on a glider's handicap. [On weak days, inexperienced pilots should be made aware of minimum distance rules: pilots who return to the airport for a landing must achieve half the handicapped minimum distance to receive a score greater than zero, and thus to count as competitors.](#)

9. Guidance Revised: Setting Minimum Finish Height

This amends the guidance to highlight the need to consider additional factors

A10.9.2.2 In setting the Minimum Finish Height (MFH), the CD should ~~take into account~~ [consider](#) expected weather, glider performance, pilot skill and experience, [terrain, landability, relations with property owners likely to receive landing gliders along final glide routes and near the airfield, and anticipated](#) local traffic. ~~The goal is for all~~ [All finishing](#) pilots ~~to be able~~ [should have sufficient altitude](#) to safely merge into the pattern, land normally, and roll safely clear.

Note that the MFH is the minimum height for a penalty-free finish. Because a valid finish (with a ~~very small~~ penalty) may be up to 200' below the MFH (to accommodate instrumentation errors), it is this lower height that should be considered when setting the MFH. Thus [in the absence of landability, traffic, or other concerns](#), the MFH should normally be 700' AGL [at a mile](#), which ~~avoids creating a big step in points (landout rather than speed finish) at 300 ft AGL~~ [leaves even the lowest valid finisher with 500' for a pattern and landing.](#)

When non-contest traffic is ~~allowed~~ [possible](#) during the time gliders are finishing, consider a MFH of at least 1000' AGL at one mile, plus 200' per mile beyond that, with the goal that contest and non-contest traffic can be smoothly integrated into a normal pattern.

10. Guidance Revised: Weighing Procedures

This addresses some concerns raised by organizers as to required/proper procedures

[A]6.8.2 Managing Weighing

Prior to the start of the contest, ~~the CD should make~~ [create](#) a chart showing each glider's Contest ID, the maximum allowable weight, and the weight of the main gear and the tail at that maximum weight. Once this is done, only the main gear need be weighed [to verify compliance. Consider establishing weights in the "tow-out configuration" \(e.g. attached to the tow vehicle\), as this allows weight to be checked with minimum time and effort.](#)

[At the mandatory safety briefing, weighing procedures \(locations, times, etc.\) should be announced to all pilots.](#)

Scales should be located so that it is convenient for a glider to be weighed on the way to the grid. Weights should be taken with the wings balanced (not necessarily exactly level) in a cross or headwind (never a tailwind). Unofficial weighings can be done early in the day, but once a glider is officially weighed, Rule 6.8.2.2 applies: a violation can be considered unsportsmanlike conduct.

Pilots high on the score sheet (say, positions 1 through 5) should be weighed every day. Others can be weighed at random. With portable scales, weight checking can be done on the grid, between grid time and launch time.

Note that Rule 12.2.5.4 specifies the penalty when a glider is over or under weight.

Not all contests will have means for precise enforcement of weight rules (i.e. scales). This does not mean that weight rules are suspended - pilots are expected to make a good-faith effort to comply.

11. Guidance: Aerotow Route Selection

This addresses concerns raised by pilots

[\[A\]10.6.2.9](#) [The route that towplanes follow should allow for gliders to release in an area where lift can be expected, to expend some altitude searching for it, and to return home for a safe landing if none is found.](#)

12. Guidance: Flight Log Publication

This addresses concerns raised by non entrant pilots regarding the timely availability of flight logs in a public location but acknowledges that not all contest sites have the required internet connectivity.

[\[A\]10.5.1.6](#) [The requirement to publish flight documentation to a website is best met by use of publication features built into the SSA website. Best practice is for scorers to publish all logs to the SSA website daily.](#)

13. Guidance: Remote Finish is Available by Waiver

Request a waiver if it is anticipated that an exception to 10.9.2.1 is necessary

[\[A\]10.9.2.1](#) [The requirement that the Finish Point be within 2 miles of the home airfield may not suit certain unusual cases. Should a remote finish be needed, a waiver is available; this can be requested using the procedures of Rule 1.7. Take care that a remote finish allows pilots to make a subsequent safe landing.](#)

14. Errata: Finisher's Score is Never to be Less than Non-Finisher with the Same Distance (Cylinder Finish)

This closes a loophole by which a low finisher could receive a lower score than a pilot who arrives home too low to be eligible for a speed finish.

10.9.2.5.2 When the Finish Height Difference is greater than zero and not greater than 200 feet, a penalty (Rule 12.1.4.5) applies; [such penalty shall not yield a score lower than if Finish Height Difference exceeded 200'](#).

12.1.4.5 Finish penalty (Rule 10.9.3.4): penalty = 5 + (Finish Height Difference) / 5 [\(but not greater than to yield the score that would have resulted if Finish Height Difference exceeded 200'\)](#)

15. Errata: Replacement of the Word "Shall" with "Should" in Multiple Rules

The purpose of this set of changes is to clarify situations where advice and best practice (use of the word "should") is to be differentiated from a hard requirement (use of the word "shall"). Failure to comply a rule where "shall" is the operative word can be the basis for a protest, while failure to comply with a rule where the operative word is "should" cannot be used as the basis for a protest.

- 4.3 The official practice period shall be one or two days immediately preceding the period of competition. All contest support functions (Start/Finish, Scoring, sailplane weighing, retrieve office, etc.) ~~shall~~ [should](#) be operational during this period.
- 5.3.11 Successful applicants ~~shall~~ [should](#) be notified as soon as possible, and always within a week of acceptance
- 5.6.3.1 Official databases in computerized form of control points (Rule 5.6.1) and of closed airspace (Rule 5.6.2) ~~shall~~ [should](#) be made available no later than 30 days prior to the first scheduled competition day.
- 10.1.2 Grid Time - the time at which all sailplanes should be on the launch grid, as specified by the CD each day. This time ~~shall~~ [should](#) be at least one hour after the close of a daily pilots' meeting, and 25 minutes before the expected time of the first launch.
- 10.1.8 Contest Sunset - the CD shall designate a Contest Sunset time, which ~~shall~~ [should](#) be approximately 10 minutes prior to the earliest time of sunset at the contest site during the period of competition.
- 10.6.1.4 The CD shall maintain an auxiliary launch list, indicating the order ~~in which~~ of launches after the last scheduled grid position ~~shall take place~~. Pilots who wish to pull back or re-launch are placed on this list on a first-come, first-served basis
- 10.6.2.1 Pilots ~~shall~~ [should](#) have their planes in the proper grid position at Grid Time and be ready to launch 20 minutes after Grid Time. A pilot who is not in proper position at Grid Time, or is not ready to launch in sequence will be deemed to have pulled back.

- 10.8.1.1 As the last pilot who accepts the designated launch starts the takeoff roll, the CD will announce the time of the class's task opening, which ~~shall~~ should be approximately 15 minutes after this launch, and long enough to allow this pilot a fair chance to climb prior to the task opening.
- 10.8.1.4 An advisory ~~shall~~ should be transmitted at the time the task opens.
- 10.8.5.1 Each task shall include a Maximum Start Height (MSH) above the home field. This height ~~shall~~ should normally not be less than 3500' AGL ~~nor~~ and shall not be more than 10000' AGL.
- 10.8.9 During contests that include more than one competition class, starts ~~shall~~ should be chosen to minimize the possibility of conflicts between pilots of different classes.
- 10.9.1.2.1 When four miles from the Finish Point, the pilot ~~shall~~ should transmit "[Contest ID] four miles." When a finish could come from more than one direction, radio calls ~~shall~~ should include the direction from which the pilot is finishing.
- 10.9.1.2.2 When a finish cylinder is in use (Rule 10.9.2), the pilot ~~shall~~ should transmit "[Contest ID] Finish" when crossing the perimeter of that cylinder.
- 10.9.1.2.4 When an alternate frequency is in use for landings, pilots ~~shall~~ should change from the contest frequency to the landing frequency at a designated distance greater than 4 miles from the finish point and make all subsequent transmissions on the landing frequency.
- 10.9.4.2.1 When four miles from a rolling finish, the pilot ~~shall~~ should transmit "[Contest ID] four miles, rolling finish."
- 10.10.2.2.2 The Outlanding Report ~~shall~~ should include a contact telephone number (~~if available~~), control points achieved, the landing location, and retrieve instructions. If the landing site is an airfield, the name of the airfield suffices as the location; otherwise, the latitude/longitude coordinates of the landing site, accurate within 0.5 miles, shall be included.
- 11.2.1.1 Times will be rounded to the nearest whole second. The CD ~~shall~~ should ensure that all clocks used for contest timing are synchronized and correct.
- 11.2.2.3.2 At each valid turnpoint the Scorer ~~shall~~ determines the fix that in combination with other control fixes gives the pilot the greatest scored distance. Each such control fix is used as the terminating point of one task leg and the originating point of the subsequent leg.
- 11.10.1 Unofficial score sheets and flight documentation ~~shall~~ should be published as soon as practicable, normally no later than the next daily Pilot Meeting (or 9:00 the next day, in the case of a day without a Pilot Meeting).

16. **Errata: Include Handicapping Scoring Formulas in FAI Rules (No Rule Change)**

No rule change. *The handicapping formulas were not transferred to the FAI rules when the FAI handicapped class was introduced. The formulas are restated to include consideration of handicaps if appropriate.*

[R]11.3 Scoring Nomenclature

BESTDIST - Best Distance achieved (Rule 11.6.9)
 BESTSPD - Best Speed - Greatest value of SPEED achieved by any Finisher
 BONUS - Airfield Landing Bonus (Rule 11.4.5)
 Contestant - defined in Rule 11.1.1
 DIST - Scored Distance (Rule 11.2.3)
 Finisher - defined in Rule 11.1.2
 HCP - Sailplane's Handicap Factor (Rule 11.4.3).
 HCPDIST - Handicapped Distance (Rule 11.4.4).
 MAXTATDIST - the maximum possible distance for a Turn-Area task (Rule 11.6.3.2.2)
 MDP - Maximum Distance Points (Rules 11.5.4, 11.6.7)
 MINTIME - Minimum Flight Time, as declared by CD
 MSP - Maximum Speed Points (Rule 11.5.3, Rule 11.6.6)
 POINTS - the calculated score (Rules 11.5.5, 11.5.6, 11.6.8, 11.6.10)
 SCR - Scored Completion Ratio (Rules 11.5.2, 11.6.5)
 SMTT - Standard Minimum Task Time (Rule 10.3.1.1)
 SPEED - Scored speed (Rules 11.5.1, 11.6.4) - applies only to a Finisher
 STF - Short Task Factor (Rule 11.4.2)
 STOC - Scored Time on Course (Rule 11.6.3) - applies only to a Finisher
 TASKDIST - Task Distance - The sum of the lengths of all legs of the task
 TOC - Actual Time on Course (Rule 11.4.1) - applies only to a Finisher
 UF - Undertime Finishers - Number of Finishers whose TOC is more than 15 minutes under MINTIME
 UTFACTOR - Undertime Factor (Rule 11.6.3.2) - applies to a finisher of a MAT or TAT whose TOC is less than MINTIME

[R]11.4 Scoring Equations – General

[R]11.4.1 Time on course:

TOC = (Scored finish time) - (Scored start time)

[R]11.4.2 Short Task Factor:

If there are no Finishers, STF = 1.0

Otherwise, STF = (TOC of Finisher with BESTSPD) / SMTT (but not greater than 1.0)

[R]11.4.3 Handicap Factor

[R]11.4.3.1 When handicapping is in effect, each sailplane is assigned a Handicap Factor from the SSA Handicap List. If a sailplane is not listed, a Handicap Factor can be obtained by contacting the SSA Contest Committee at least 30 days prior to the scheduled competition.

[R]11.4.3.2 When handicapping is not in effect, each sailplane is assigned a Handicap Factor of 1.0.

[R]11.4.3.3 Handicap Factors are not adjusted for configuration changes, weight, or other reasons.

[R]11.4.4 Handicapped Distance

Handicapped Distance is scored distance multiplied by the Handicap Factor:

$HCPDIST = HCP * DIST$

[R]11.4.5 Airfield Landing Bonus

For eligible pilots (Rule 10.10.3), BONUS = 25; otherwise, BONUS = 0.

- [R]11.4.6 Worst Day Score Adjustment
If this is declared to be in effect, an adjustment is calculated and added to the cumulative score of each entrant.
- [R]11.4.6.1 For each entrant, Worst Day Score Differential (WDS D) is the greatest difference on any contest day between the entrant's score (before application of a Contest penalty) and the highest score achieved by any regular entrant in the class on that day.
- [R]11.4.6.2 A Worst Day Score Adjustment (WDSA) is added to each entrant's cumulative score, as follows:
After one official day: WDSA = zero
After 2 official days: WDSA = 0.25 * WDS D
After 3 official days: WDSA = 0.5 * WDS D
After 4 official days: WDSA = 0.75 * WDS D
After 5 or more official days: WDSA = WDS D
- [R]11.5 Scoring Equations - Assigned Task
- [R]11.5.1 Speed:
$$\text{SPEED} = \text{HCPDIST} / \text{TOC}$$
- [R]11.5.2 Scored completion ratio:
$$\text{SCR} = (\text{Number of Finishers}) / (\text{Number of contestants})$$
- [R]11.5.3 Maximum Speed Points:
$$\text{MSP} = \text{STF} * (600 + 660 * \text{SCR}) \text{ (but not greater than } \text{STF} * 1000)$$
- [R]11.5.4 Maximum Distance Points:
$$\text{MDP} = \text{MSP} * (0.8 - 0.2 * \text{SCR})$$
- [R]11.5.5 Points for Finishers:
POINTS shall be equal to the largest of the following three quantities:
$$\text{MSP} * \text{SPEED} / \text{BESTSPD}$$

$$\text{MDP} + 30 + \text{MSP} * 0.2 * ((\text{SPEED}/\text{BESTSPD}) - 0.4)$$

$$\text{MDP} + 30$$
- [R]11.5.6 Points for Non-Finishers:
$$\text{POINTS} = \text{BONUS} + \text{MDP} * \text{DIST} / \text{TASKDIST}$$
- [R]11.6 Scoring Equations - Modified Assigned Task and Turn Area Task
- [R]11.6.1 Not Applicable
- [R]11.6.2 Not Applicable

- [R]11.6.3 Scored Time on Course:
- [R]11.6.3.1 For finishers whose TOC is not less than MINTIME:
 $STOC = TOC$
- [R]11.6.3.2 For finishers whose TOC is less than MINTIME
 $STOC = MINTIME - (MINTIME - TOC) * UTFACTOR$
- [R]11.6.3.2.1 For a Modified Assigned Task, UTFACTOR = 0.1
- [R]11.6.3.2.2 For a Turn-Area Task:
 MAXTATDIST = the maximum possible distance for a Turn-Area task
 (computed from the center of the start cylinder, less the start radius)
 $UTFACTOR = 0.1 + 6 * ((DIST / MAXTATDIST) - 0.85)$
 (but not less than 0.1, nor greater than 1.0)
- [R]11.6.4 Speed:
 $SPEED = HCPDIST / STOC$
- [R]11.6.5 Scored completion ratio:
 $SCR = ((\text{Number of Finishers}) - 0.75 * UF) / (\text{Number of contestants})$
- [R]11.6.6 Maximum Speed Points:
 $MSP = STF * (600 + 500 * SCR)$ (but not greater than $STF * 1000$)
- [R]11.6.7 Maximum Distance Points:
 $MDP = MSP * (0.8 - 0.2 * SCR)$
- [R]11.6.8 Points for Finishers:
 POINTS shall be equal to the larger of the following two quantities:
 $MSP * SPEED / BESTSPD$
 $MDP * HCPDIST / BESTDIST + 30$ (But not greater than $MDP + 30$.)
- [R]11.6.9 Best Distance:
 If there are no Finishers, BESTDIST is the greatest HCPDIST achieved by any pilot.
 Otherwise, BESTDIST is the larger of the following two quantities:
 greatest HCPDIST achieved by any Finisher
 $BESTSPD * MINTIME$
- [R]11.6.10 Points for Non-Finishers:
 $POINTS = BONUS + MDP * HCPDIST / BESTDIST$
 (but not greater than $BONUS + MDP$)