

2015 Rules Change Recommendations

8-Feb-2015

This document contains the text of changes recommended by the SSA Competition Rules Committee for implementation in 2015. National FAI Rules apply to all 4 rule sets unless superseded. The other following sections show only the text of rules to which recommended changes apply.

14-Jan-15	Version 1.0 to RC for Review and Corrections
21-Jan-15	2016 Notice edited per BB
8-Feb-15	US Club Class (6.12.3.1) definition corrected from limit of 1.02 to 1.12

Notice regarding possible change for 2016:

The Rules Committee proposes to remove the restrictions on carriage of electronic devices in the cockpit. This change would allow pilots to carry and use smartphones and their apps (weather, tracking), and eliminates the rules and procedures requiring the disabling of artificial horizon features in soaring flight computers.

Rules against cloud flying remain, and rules against receiving voice or data from crew or other human input remain. Violations will be subject to severe penalties, including unsportsmanlike conduct.

These changes are potentially very significant. In particular, as SSA tracking develops, and if pilots are able to get such data in the air, they may be able to get data on competitors positions.

We highlight this change in order to encourage vigorous discussion of this issue in the 2015 season prior to the fall poll.

National FAI-Class

Notes on changes:

1.5 A needed clarification (AGL is referenced to home field elevation).

6.8.4 The Limited Ballast Rule deleted

8.3 Removes the "endless" protest possibility.

10.3.1.6 Clarification

10.5.4.1 Clarification.

10.6.2.3, 10.6.2.4 Three-launch limit is recommended for elimination.

10.6.3 Motorglider engine use rules simplified. There is no longer need for a distinction between relaunch and engine-test rules.

10.8.8 Mandatory start time reporting is recommended for elimination.

10.9.5.5 Time adjustment for a Safety Finish to be based on a more realistic final glide speed (90 vs. 60 mph).

10.10.2.2 Clarification

10.11 Multiple task attempt rules simplified by eliminating the requirement that a valid finish requires a landing at the home field.

11.1.1 Counts those who land out before starting among those who “attempted the task”.

11.2.1.5.1 Missing words inserted.

11.2.2.2 Not needed (covered in 11.2.3.4).

11.2.2.4 Requirement to land at home for a valid finish is recommended for elimination.

11.2.2.7.2 Pilot should not be able to delay Task Claim submission endlessly (see 8.3, above).

11.2.3.5 Clearer wording.

11.3 – 11.6 Thorough reorganization of scoring formulas (but not calculation changes).

Nomenclature is now presented alphabetically. The same formulas now work for all classes at all contests (National, Regional, unhandicapped & handicapped). Unhandicapped classes are handled by 11.4.1.1, which assigns a handicap of 1.0 to all gliders.

12.1.4.6 Unneeded when start time reporting cannot be mandatory (see 10.8.8, above).

12.1.4.10 Grace period for motorglider start is eliminated: a start sooner than 20 minutes is invalid.

12.1.4.10, 12.2.5.6 Minor airspace violation is now a daily, rather than a contest penalty.

1 GENERAL

1.5 Within these rules, unless otherwise noted:

- Distances are in statute miles
- Speeds are in statute miles per hour
- Weights are in pounds
- Altitudes are in feet
- **Altitudes AGL are referenced to the elevation of the home airfield**
- Times-of-day are based on a local 24-hour clock

6.8.3 No-ballast rules

Under unusual circumstances that in the judgment of the CD make the use of disposable ballast inadvisable, the CD shall announce prior to the first launch that no-ballast rules are in effect.

6.8.3.1 Disposable ballast is prohibited with the exception of disposable tail ballast.

6.8.3.2 Fixed ballast is permitted, but not more than an amount that brings the sailplane to its maximum handicap weight, as defined in the SSA Sailplane Handicap List.

~~6.8.4 Limited ballast rules~~

~~The CD may announce a limited ballast day no later than one hour before grid time:~~

~~6.8.4.1 A maximum takeoff weight shall be announced.~~

~~6.8.4.2 Sailplanes may carry disposable ballast that yields a takeoff weight not greater than the announced maximum.~~

~~6.8.4.3 Sailplanes may exceed the maximum takeoff weight only if they follow Rule 6.8.3 and if they do not carry removable fixed ballast (bags of shot, sheets of lead, or any other baggage whose only purpose is to increase weight).~~

8 PROTEST

8.1 Each entrant is expected to follow these rules and the rulings of the Competition Director, who is the enforcer and arbiter of these rules. For a protest against a ruling of the CD to be sustained there must be clear evidence that a provision of these Rules was not followed.

8.2 An entrant may request an explanation of an action or decision made by any contest official. This request shall be made of the CD, either orally or in writing. The CD shall respond in kind, as promptly as possible and always within 24 hours.

~~8.3 If an entrant feels that these Rules have been incorrectly applied, a written protest must be delivered to the CD as soon as is practical. A protest relating to scores shall be delivered prior to the day in question becoming Official (Rule 11.9.3); others shall be delivered within 24 hours of the protested incident or ruling.~~

8.3 An entrant who believes that these Rules have been incorrectly applied shall deliver a written protest to the CD within 24 hours of the time of the protested incident, action or score.

10.3.1.6 Tasks should be set with due regard for the range of Handicap Factors assigned to all regular entrants.

10.5.4 Flight log problems

10.5.4.1 Use of multiple **incomplete** flight logs

~~10.6.2.3 Each entrant is permitted a maximum of three launches each competition day. Launches aborted due to no fault of the sailplane pilot will not be counted.~~

~~10.6.2.4 Each time a pilot pulls out of a grid position one of the three permitted daily launches is forfeited.~~

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 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.

10.6.3.1.3 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.

10.6.3.1.4 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.

10.6.3.1.5 Any use of the engine not within ~~2~~ **3** 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.~~

10.6.3.2.3 Sailplanes that exceed the aerotow release altitude under power must within 10 minutes after engine shut-down 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~~ **3** miles of the home airfield and ~~above 1000' AGL~~ **not below 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~~ **20** 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).~~

~~10.8.8 Start time reporting~~

~~The CD may require pilots to report their start times by radio. The following rules apply:~~

~~10.8.8.1 To avoid a penalty (Rule 12.1.4.6), a start time must be reported within 15 minutes after the start is made, and must be accurate within 2 minutes.~~

~~10.8.8.2 Beginning no later than the time of task opening, a contest official designated by the CD shall monitor the contest frequency, maintain an official list of reported start times and the time the report was received, and confirm receipt of reports.~~

~~10.8.8.3 Crews may report start times for pilots by appearing in person before the official designated by the CD.~~

~~10.8.8.4 Deliberate mis-reporting of start times can be penalized as Unsportsmanlike Conduct. (Penalty described in Rule 12.2.5.3.)~~

10.8.8 Start time reporting

Start time reporting is optional; such reports shall be transmitted on the contest radio frequency and should be accurate within 2 minutes. Deliberate mis-reporting of start times can be penalized as Unsportsmanlike Conduct.

10.9.5 Safety finish

10.9.5.1 The Safety finish area is a cylinder centered on the Finish Point with a radius of 5 or 10 miles, as announced by the CD.

10.9.5.2 If weather conditions warrant, the CD may activate the Safety finish by a radio announcement on the contest frequency.

10.9.5.3 When a Safety finish is active, a pilot may claim a finish by obtaining one fix within the Safety finish cylinder, provided the slope from the claimed fix to the Projected Finish Location is not less than 200 feet per mile and no claimed turnpoint was achieved after the time of the claimed fix. A Safety Finish must be claimed using a Task Claim form (Rule 10.5.1.3.1).

10.9.5.3.1 When a Finish Cylinder is in use, the Projected Finish Location is the nearest part of the Finish Cylinder at the minimum finish height.

10.9.5.3.2 When a Finish Gate is in use, the Projected Finish Location is the Finish Point.

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

10.9.5.5 The pilot's scored finish time is taken as the time of the claimed fix plus a time adjustment of ~~one minute~~ **40 seconds** per mile for the distance from the claimed fix to the Projected Finish Location.

10.9.5.6 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.

10.10.2.2 Notification of ~~landout~~ **outlanding**

10.11 Multiple Task Attempts

10.11.1 A task may be attempted more than once; the best-scoring attempt will be used.

~~10.11.2 A pilot who has completed a task may elect to land at the contest site; having landed, flight documentation must be submitted within the Flight Documentation Interval (Rule 10.10.1.1). The pilot may then re-launch for another attempt; no result of the subsequent flight can affect the distance and speed obtained from the first.~~

~~10.11.3 A pilot who has completed a task may attempt to fly the task again without a re-launch. The first task attempt is not at risk if the pilot meets the conditions of Rule 11.2.2.4.~~

11 SCORING

11.1 General

11.1.1 A Contestant is a regular entrant whose Scored Distance (Rule 11.2.3) is greater than zero, **or whose actual landing was not at the contest site.**

11.2.1.5.1 When the Scorer must measure a pilot's height above ground level (AGL), this height shall be the difference between **the altitude of** a recorded fix and that of a fix recorded on the ground. For all purposes except finish height, a fix prior to takeoff shall be used. For finish height, the Scorer shall use the more favorable of a pre-takeoff or post-landing fix.

11.2.2 Task Evaluation

11.2.2.1 Each pilot shall submit flight documentation each day a launch is made; it shall accurately document each flight that the pilot made. Failure to submit flight documentation incurs a contest penalty (Rule 12.2.5.5).

11.2.2.2 If the flight documentation includes a Task Claim form under the provisions of Rule 10.5.1.3, task evaluation is based on this form, which may not be altered once submitted (but a subsequent Task Claim can be submitted under the provisions of Rule 11.2.2.7). ~~When there was~~

~~any pilot option at the time of landing, the Task Claim should include the point being sought at the time of landing; when this is absent, the flight shall be scored as if the pilot had listed the Finish as the point being sought.~~

~~11.2.2.4 Task completion—The pilot has completed the task if all turnpoints are valid, yield a scored distance (Rule 11.2.3) not less than the Standard Minimum Task Distance, and the pilot obtained a scored start time, a finish time prior to finish closing, and either landed at the contest site or after finishing obtained a valid start (Rule 10.8.5) and a subsequent fix at least 5 miles from the start fix. Otherwise the task is incomplete.~~

11.2.2.4 Task completion - The pilot has completed the task if all turnpoints are valid, yield a handicapped distance (Rule 11.4.3) not less than the Standard Minimum Task Distance, and the pilot obtained both a scored start time and a finish time prior to finish closing. Otherwise the task is incomplete.

11.2.2.7.2 A subsequent Task Claim form will be accepted if it is received ~~prior to a day's results being declared Official~~ **within 24 hours of submission of the initial submission of flight documentation** and if it results in a more accurate score.

11.2.3.5 Scored Distance is zero if:

- The pilot has no valid start time (Rule 10.8).
- The pilot lands at the home field (or the pilot of a motorized sailplane used the power unit after **launch starting and before landing**) and ~~the distance calculated above~~ **Handicapped Distance (Rule 11.4.3)** is less than half the Standard Minimum Task Distance.

~~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 10.10.3, Rule 11.4.3)~~

~~Contestant—defined in Rule 11.1.1 DIST—Scored Distance (Rule 11.2.3) Finisher—defined in Rule 11.1.2~~

~~-MAXTATDIST—the maximum possible distance for a Turn-Area task. This distance is computed from the center of the start cylinder, less the start radius. If multiple start points are used, MAXTATDIST is computed separately for each start cylinder (Rule 10.8.4)~~

~~MDP—Maximum Distance Points (Rule 11.5.4, Rule 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 (Rule 11.5.5, Rule 11.5.6, Rule 11.6.8, Rule 11.6.10) SCR—Scored Completion Ratio (Rule 11.5.2, Rule 11.6.5)~~

~~SMTT—Standard Minimum Task Time (Rule 10.3.1.1)~~

~~SPEED—Scored speed (Rules 11.5.1, Rule 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~~

~~11.4 Scoring Equations—General~~

~~11.4.1 Time on course:~~

~~TOC = (Scored finish time) – (Scored start time)~~

~~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)~~

~~11.4.3 Airfield Landing Bonus~~

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

~~11.5 Scoring Equations—Assigned Task~~

~~11.5.1 Speed:~~

~~SPEED = DIST / TOC~~

~~11.5.2 Scored completion ratio:~~

~~SCR = (Number of Finishers) / (Number of contestants)~~

~~11.5.3 Maximum Speed Points:~~

~~MSP = STF * (600 + 660 * SCR) (but not greater than STF * 1000)~~

~~11.5.4 Maximum Distance Points: MDP = MSP * (0.8 – 0.2 * SCR)~~

~~11.5.5 Points for Finishers:~~

~~POINTS shall be equal to the largest of the following three quantities: MSP * SPEED / BESTSPD~~

~~MDP + 30 + MSP * 0.2 * ((SPEED/BESTSPD) – 0.4) MDP + 30~~

~~11.5.6 Points for Non-Finishers:~~

~~POINTS = BONUS + MDP * DIST / TASKDIST~~

~~11.6 Scoring Equations—Modified Assigned Task and Turn Area Task~~

~~11.6.1 Not Applicable~~

~~11.6.2 Not Applicable~~

~~11.6.3 Scored Time on Course:~~

~~11.6.3.1 For finishers whose TOC is not less than MINTIME: STOC = TOC~~

~~11.6.3.2 For finishers whose TOC is less than MINTIME: STOC = MINTIME – (MINTIME – TOC) *~~

~~UTFACTOR For a Turn-area task:~~

~~UTFACTOR = 0.1 + 6 * ((DIST / MAXTATDIST) – 0.85) (but not less than 0.1, nor greater than 1.0)~~

~~otherwise, UTFACTOR = 0.1~~

~~11.6.4 Speed:~~

~~SPEED = DIST / STOC~~

~~11.6.5 Scored completion ratio:~~

~~SCR = ((Number of Finishers) – 0.75 * UF) / (Number of contestants)~~

~~11.6.6 Maximum Speed Points:~~

~~MSP = STF * (600 + 500 * SCR) (but not greater than STF * 1000)~~

~~11.6.7 Maximum Distance Points: MDP = MSP * (0.8 – 0.2 * SCR)~~

~~11.6.8 Points for Finishers:~~

~~POINTS shall be equal to the largest of the following two quantities: MSP * SPEED / BESTSPD~~

~~MDP * DIST/BESTDIST + 30 (But not greater than MDP + 30.)~~

~~11.6.9 Best Distance:~~

~~If there are no Finishers, BESTDIST is the greatest scored distance achieved by any pilot. Otherwise, BESTDIST is the larger of the greatest scored distance achieved by any Finisher and ($BESTSPD * MINTIME$).~~

~~11.6.10 Points for Non-Finishers:~~

~~$POINTS = BONUS + MDP * DIST / BESTDIST$
(but not greater than $BONUS + MDP$)~~

11.3 Scoring Nomenclature

BESTDIST - Best handicapped distance achieved (Rule 11.5.6, 11.6.9)

BESTSPD - Best Speed (Rule 11.4.4)

AFBONUS - Airfield Landing Bonus (Rule 10.10.3, 11.4.6)

Contestant - defined in Rule 11.1.1

Finisher - defined in Rule 11.1.2

HCP - Sailplane's Handicap Factor (Rule 11.4.1).

HCPDIST - Handicapped Distance (Rule 11.4.3).

SPEED - Scored speed (Rule 11.5.4, 11.6.7) - applies only to a Finisher

MAXDP - Maximum Distance Points (Rule 11.5.3, 11.6.4)

MINTIME - Minimum Flight Time, as declared by CD (Rule 10.3.2.2.1, 10.3.2.3.2)

MAXSP - Maximum Speed Points (Rule 11.5.2, 11.6.3)

MAXTATDIST – maximum Turn-Area Task distance (Rule 11.6.5) - applies to a finisher of a TAT whose TOC is less than MINTIME

POINTS - the calculated score (Rule 11.5.5, 11.5.7, 11.6.8, 11.6.10)

Scored Distance – defined in Rule 11.2.3

SCR - Scored Completion Ratio (Rule 11.5.1, 11.6.2)

SMTT - Standard Minimum Task Time (Rule 10.3.1.1)

STF - Short Task Factor (Rule 11.4.5)

STOC - Scored Time on Course (Rule 11.6.6) - applies only to a Finisher

TOC - Actual Time on Course (Rule 11.4.2) - applies only to a Finisher

UF - Undertime Finishers (Rule 11.6.1)

UTF - Undertime Factor (Rule 11.6.5) - applies to a finisher of a MAT or TAT whose TOC is less than MINTIME

11.4 Scoring Equations – General

11.4.1 Handicap Factor

11.4.1.1 For an unhandicapped competition class, each sailplane is assigned a Handicap Factor (HCP) of 1.0, which is not modified for weight, sailplane configuration, or other reasons.

11.4.1.2 For a handicapped competition class, each sailplane is assigned a Handicap Factor (HCP) from the SSA Handicap List. (A Handicap Factor for a sailplane not listed can be obtained by contacting the SSA Contest Committee at least 30 days prior to the scheduled competition.) Sailplanes that compete in a configuration different from that on which the listed handicap was based receive handicap adjustments, as follows:

11.4.1.2.1 If a sailplane's wingspan has been increased and no specific Handicap Factor for the sailplane with that span is listed, its Handicap Factor shall be multiplied by the following:

$1.0 - ((\text{wingspan}) - (\text{original span})) / (2 * (\text{original span}))$

11.4.1.2.2 When winglets are added to a sailplane not handicapped with winglets, the handicap Factor shall be multiplied by 0.99.

11.4.1.2.3 When wing turbulence is applied to a sailplane handicapped without turbulence, the Handicap Factor shall be multiplied by 0.99.

11.4.1.2.4 When wing-root fairings are added to a sailplane handicapped without fairings, the Handicap Factor shall be multiplied by 0.99.

11.4.1.2.5 Other significant aerodynamic modifications may result in a lower handicap factor being assigned.

11.4.1.2.6 When weight adjustments apply and Competition Weight (Rule 6.12.3) is different from the specified Handicap Weight, the Handicap Factor shall be multiplied by the following:

$$1.0 - ((\text{Competition Weight}) - (\text{Handicap Weight})) * 0.0002$$

11.4.2 Time on course:

$$\text{TOC} = (\text{Scored finish time}) - (\text{Scored start time})$$

11.4.3 Handicapped Distance:

$$\text{HCPDIST} = \text{HCP} * \text{Scored Distance}$$

11.4.4 Best Speed

BESTSPD = Greatest value of SPEED achieved by any Finisher

11.4.5 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)

11.4.6 Airfield Landing Bonus

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

11.5 Scoring Equations - Assigned Task

11.5.1 Scored completion ratio:

$$\text{SCR} = (\text{Number of Finishers}) / (\text{Number of contestants})$$

11.5.2 Maximum Speed Points:

$$\text{MAXSP} = \text{STF} * (600 + 660 * \text{SCR}) \text{ (but not greater than } \text{STF} * 1000)$$

11.5.3 Maximum Distance Points:

$$\text{MAXDP} = \text{MAXSP} * (0.8 - 0.2 * \text{SCR})$$

11.5.4 Speed:

$$\text{SPEED} = \text{HCPDIST} / \text{TOC}$$

11.5.5 Points for Finishers:

POINTS shall be equal to the largest of the following three quantities:

$$\text{MAXSP} * \text{SPEED} / \text{BESTSPD}$$

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

$$\text{MAXDP} + 30$$

11.5.6 Best Distance:

BESTDIST is the greatest value of HCPDIST achieved by any regular entrant.

11.5.7 Points for Non-Finishers:

$$\text{POINTS} = \text{AFBONUS} + \text{MAXDP} * \text{HCPDIST} / \text{BESTDIST}$$

11.6 Scoring Equations – Turn-Area Task and Modified Assigned Task

11.6.1 Undertime finishers:

$$\text{UF} = \text{Number of Finishers whose TOC is more than 15 minutes less than MINTIME}$$

11.6.2 Scored completion ratio:

$SCR = ((\text{Number of Finishers}) - 0.75 * UF) / (\text{Number of contestants})$

11.6.3 Maximum Speed Points:

$MAXSP = STF * (600 + 500 * SCR)$ (but not greater than $STF * 1000$)

11.6.4 Maximum Distance Points:

$MAXDP = MAXSP * (0.8 - 0.2 * SCR)$

11.6.5 Undertime factor:

For a Modified Assigned Task: $UTF = 0.1$

For a Turn-area task:

$MAXTATDIST$ = maximum possible distance, computed from the center of the start cylinder, less the start radius

$UTF = 0.1 + 6 * ((DIST / MAXTATDIST) - 0.85)$ (but not less than 0.1, nor greater than 1.0)

11.6.6 Scored Time on Course:

11.6.6.1 For finishers whose TOC is not less than MINTIME: $STOC = TOC$

11.6.6.2 For finishers whose TOC is less than MINTIME: $STOC = MINTIME - (MINTIME - TOC) * UTF$

11.6.7 Speed:

$SPEED = HCPDIST / STOC$

11.6.8 Points for Finishers:

POINTS shall be equal to the larger of the following two quantities:

$MAXSP * HCPSPD / BESTSPD$

$MAXDP * HCPDIST / BESTDIST + 30$ (But not greater than $MAXDP + 30$)

11.6.9 Best Distance:

If there are no Finishers, $BESTDIST$ is the greatest value of $HCPDIST$ achieved by any pilot. Otherwise, $BESTDIST$ is the larger of the greatest $HCPDIST$ achieved by any Finisher and $(BESTSPD * MINTIME)$.

11.6.10 Points for Non-Finishers:

$POINTS = AFBONUS + MAXDP * HCPDIST / BESTDIST$ (but not greater than $AFBONUS + MAXDP$)

12 PENALTIES

12.1 Task Penalties

~~12.1.4.6 Improper reporting of start time (Rule 10.8.8.1): penalty = 10~~

~~12.1.4.10 Start time earlier than 20 minutes after the use of a motorized sailplane's power unit for re-launch Rule 10.6.3.7.2: penalty = 100~~

12.1.4.10 Minor Airspace violation(Rule 10.12.3): penalty = 25

12.2 Contest Penalties

~~12.2.5.6 Airspace clearance violations (Rule 10.12.4)~~

~~12.2.5.6.1 Minor Airspace violation: penalty = 25~~

~~12.2.5.6.2 Serious airspace violation: penalty = 100 + loss of all daily points~~

12.2.5.6 Serious airspace violation (Rule 10.12.3): penalty = 100 + loss of all daily points

National Sport-Class

Notes on changes:

5.7, 6.12.4, 10.3.2.1 Modern class is no longer needed.

6.12.3.1 Entry is based on base handicap, before any adjustments are applied.

5.7 Competition Classes

~~5.7.1 A National competition shall consist of a US Club Class Rule 6.12.3 and a Modern Class Rule 6.12.4, provided each has at least 12 regular entrants at the start of the competition.~~

~~5.7.2 In the event that the provision of Rule 5.7.1 is not met, the contest shall consist of a Sport Class Rule 6.12.2 only.~~

A National competition shall consist of a Club class (Rule 6.12.3) and/or a Sport Class (Rule 6.12.2).

6.12 Sailplane Classes

6.12.1 Handicapping will be used to minimize the differences in sailplane performance per Rule 11.6.1.

6.12.2 Sport Class

6.12.2.1 This class is open to all sailplanes, regardless of handicap

6.12.3 US Club Class

~~6.12.3.1 This class is open to sailplanes whose handicap per Rule 11.6.1 is 0.898 or greater.~~

This class is open to sailplanes whose Handicap Factor in the SSA Handicap List is not less than 0.898. The maximum Handicap Factor is 1.12: this is the maximum that can be assigned to any sailplane (regardless of its listed or calculated handicap) and the maximum that is considered in decisions about tasking.

~~6.12.4 Modern Class~~

~~6.12.4.1 This class is open to open to all sailplanes, but the maximum handicap used for scoring will be 0.940~~

10.3.2 Task Types

10.3.2.1 Assigned Task (AT) - Speed over a course of one or more designated turnpoints, with a finish at the contest site. This task is available **only** for US Club Class (Rule 6.12.3) ~~and Modern Class Rule 6.12.4, but is not used in Sport Class Rule 6.12.2.~~

Regional FAI-Class

Notes on changes:

5.2.1.2.4, 10.8.5.7 Grand-Prix start is available, but a class using it must be small.

5.7.3 CD is explicitly allowed to combine classes as needed.

10.8.5.7 “Loose” LST option is removed.

5.2 Entrants

5.2.1 Number

5.2.1.1 Minimum - For an Official competition, a class must have at least five entrants whose final score is greater than zero.

5.2.1.2 Maximum

5.2.1.2.1 The total number of sailplanes is limited to 65, unless a smaller maximum number is designated by contest organizers on the Application for Sanction form and approved by the SSA Contest Committee Chairman. This is a maximum for all classes in all contests being held at one site simultaneously.

5.2.1.2.2 Applicants to an oversubscribed contest shall be accepted without regard for the competition class to which they have applied.

5.2.1.2.3 Nationals only

5.2.1.2.4 The number of sailplanes in a class that will use a “Grand-Prix” start (Rule 10.8.5.7) is limited to 10.

5.7 Competition Classes

5.7.1 Regional FAI-class competitions may include one or more of the classes described in Rule 6.12, as selected by the contest organizer on the Application for Sanction form.

5.7.2 In addition to separate FAI classes, handicapped classes can be included as follows:

5.7.2.1 Entries to a handicapped competition class can be restricted based on criteria specified by the contest organizers on the Application for Sanction form. Possible criteria include (but are not limited to) one or more FAI classes, maximum wingspan or a handicap range (or a combination).

5.7.2.2 The handicap ranges of competition classes may overlap.

5.7.2.3 Competition classes can be labeled, promoted and tasked to appeal to pilots by skill level rather than or in addition to limitation on sailplanes.

5.7.2.4 Gliders in a FAI handicapped class shall be assigned handicaps from the SSA Handicap Table based on the glider's reference weight, without adjustment for actual flying weight.

5.7.3 If participation is deemed to be inadequate, the CD may elect to combine announced classes into a handicapped class.

6.8.3 No-ballast rules

~~No ballast rules shall apply on a day when the CD has announced this prior to the first launch.~~

~~6.8.3.1 Disposable ballast is prohibited with the exception of disposable tail ballast.~~

~~6.8.3.2 Fixed ballast is permitted, but not more than an amount that brings the sailplane to its maximum handicap weight, as defined in the SSA Sailplane Handicap List.~~

6.8.3.1 If specified by contest organizers on the Application for Sanction form, a class may use no-ballast rules. At such a contest, these rules shall apply every day.

6.8.3.2 At a contest where disposable ballast is allowed, the CD may declare prior to the first launch of a class that no-ballast apply for the day.

6.8.3.3 When no-ballast rules apply:

- **Disposable ballast is prohibited with the exception of disposable tail ballast.**

- **Fixed ballast is permitted, but not more than an amount that brings the sailplane to its maximum handicap weight, as defined in the SSA Sailplane Handicap List.**

~~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.~~

~~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.~~

10.8.5.7 If specified by contest organizers on the Application for Sanction form, a class may use a "Grand-Prix" start: a pilot whose task includes a start time later than the declared task-opening time is evaluated as if the start happened at the task-opening time.

Appendix

Notes on changes:

A10.6.2.6 Handles the issue of spreading sniffing duties.

A10.6.2.6 The choice of a Sniffer can be important; the best is a reasonably proficient contest pilot, flying a glider of performance and wing loading similar to those in the contest, who can give objective reports on the height and strength of lift, and some evaluation of how conditions appear away from the home field. The right sniffer can be a real asset; the wrong one can unnecessarily delay the launch. If no qualified sniffer is available, consider using one of the designated Task Advisors (if a contest pilot is sniffer and must remain airborne for a long time before the launch, he should be given the option of landing to clean the bugs from his wings).

It can be convenient to use a willing pilot near the front of the daily launch grid. But sniffing can be a burden, so the CD should spread this duty: if the same pilot is at the front of the launch grid more than once, consider using another pilot who is close to the front.