

1-26 CHAMPIONSHIPS RULES 2011

1 ORGANIZATION

These rules govern the 1-26 Championships.

1.1 Rule Changes (Proposed)

Rule changes may be made by the Competition Director in consultation with Association Officers and Rules Committee members present at the Championships. Normally, rule changes will be allowed only for safety reasons.

2 REGISTRATION

2.1 Registration for the 1-26 Championships requires the following:

- Current membership in the 1-26 Association and the SSA.
- A valid FAA private or higher pilot certificate with glider rating or equivalent non - US license recognized by the FAA.
- Experience in cross-country glider flying, off field landings and thermalling in gaggles. This may include, but does not require an FAI Silver Badge, Sweepstakes Program flights or other contest experience. The novice pilot who can thermal in gaggles safely and land off-field safely is qualified to compete. Novice contestants should discuss their experience with and be approved by the CD.
- Payment of the entry fee set by the sponsor.

2.2 Pilot Status

Pilots may compete as individuals or as team entrants. Each pilot must register his/her status as an individual or team entrant prior to the first scheduled contest day pilot's meeting, and each pilot must declare the contest number of the 1-26 to be flown. Team entrants may include two or three pilots.

3 SAILPLANES AND EQUIPMENT

3.0 Only Schweizer 1-26 sailplanes with standard airworthiness certificates are eligible. Exchange of a damaged 1-26 shall be reported to the Competition Director.

3.1 The 1-26 three-digit serial number is the contest number and must be displayed on the vertical tail in not less than 6" high numerals. The Competition Director may accept a different display, if satisfied there will be no identification problem.

3.2 A parachute must be worn on every contest flight.

3.3 The installation or use of instruments which will permit flight without visual reference to the ground are prohibited. Navigation aids are permitted.

4 CONTEST REQUIREMENTS

An official Championship contest will consist of eight days of which a minimum of three contest days will qualify the contest as a 1-26 Championship event.

4.1 A Contest Day is one in which every pilot is given an opportunity to start and the credited flight distance of each of the top third of the pilots attempting the task, ordered by distance, is at least 30 miles. Attempting the task means achieving a credited flight distance of at least 5 miles.

4.2 A mandatory pilot's meeting shall be held on the evening before the first scheduled competition day to present a briefing on safety, the rules, field operations and review of other contest-related matters. Pilots who fail to attend may not compete until they have been briefed on the contents of this meeting by the Competition Director or the Championship Manager. All pilots must read these rules prior to this meeting.

5 TASKING

5.1 Modified Assigned Speed Task (MAT)

A speed task over a course with one or more turn points, with a finish upon entry into the finish cylinder. The turn point cylinder radii are 1.0 mile.

- The CD shall assign a minimum task time, a minimum task distance of not less than 30 miles, a turn point sequence and a finish cylinder radius.
- The CD may assign from zero to 11 turn points.
- Assigned turn points must be attempted in the assigned sequence, but a contestant may elect to return home and finish after any turn point in the sequence.
- Contestants who achieve all assigned turn points in the assigned sequence may then elect to fly to additional turn points prior to finishing.

No turn point may be repeated unless at least two intervening turn points are achieved.

5.2 Turn Area Task (TAT)

A speed task over a course through one or more assigned turn areas with a finish upon entry into the finish cylinder.

- The turn areas are cylinders centered on a turn point.
- The CD shall designate a minimum task time, a minimum task distance of not less than 30 miles, a turn area sequence and a finish cylinder radius.
- The radius for each turn area cylinder shall be a whole number of miles not greater than 25 as assigned by the CD.
- The perimeters of successive turn area cylinders shall be no closer than 5 miles.

5.3 Minimum Task Distance

A contestant's task must comply with the assigned turn point or turn area sequence (see 5.1 and 5.2 above) and achieve the minimum task distance assigned by the CD. Flights which fail to meet these criteria shall be scored for distance only.

5.4 Task Changes

The Competition Director may change the task at any time before launch by conducting a pilots meeting. The CD may change the task after the launch has begun, but before the task opens by announcement on 123.3 MHz. A radio roll call of the contestants will be made to verify that each contestant is aware of the task change. A predetermined visual signal will be displayed on the ground to indicate that the task has been changed if any contestant fails to respond to the roll call. Each contestant is responsible for checking for the visual signal prior to starting the task. At least 10 minutes will be provided after completion of the roll call or display of the visual signal before the new task is opened.

6 CONTEST PROCEDURES

6.1 Pilots Meeting

A pilot's meeting is held prior to each day's task which will include the following:

- A briefing for the primary task.
- A weather briefing.
- Appropriate score sheets will be distributed as are available.
- The Designated Launch Grid, the order of takeoff, will be determined on the first competition day by contest officials using a random drawing of contest numbers. The takeoff order shall be altered on each competition day following a successful contest day by placing the front 20% of the grid list at the back of the grid.

- The finish cylinder closing time will be announced at the first pilots' meeting and shall not be changed thereafter.
- The Grid Time will be announced.

6.2 Grid Time

Contestants must have their gliders in the Designated Launch Grid position at Grid Time and be prepared to launch within 15 minutes. The CD may require a contestant not ready for a punctual takeoff to withdraw from the Designated Launch Grid for a later launch. A contestant may pull out of the Designated Launch Grid at any time. Contestants who pull out shall not be launched as part of the Designated Launch Grid.

6.3 Launching

Launches will normally be to 2,000 feet AGL and to a specified area. The pilot may release at any time during the tow. A pilot may take any number of tows. Launching operations shall commence when soaring flight can be sustained as determined by the CD.

7 STARTING PROCEDURES

7.1 Start Cylinder

Each task shall include a Start Point with a Start Cylinder having a radius of at least two miles. Normally, the start cylinder will be positioned so that the edge of the cylinder in the direction of the first turn point/turn area will be close to the Championship site. The altitude of the Start Cylinder is limited by local airspace restriction and FAR rules.

7.2 Prior to Start

Following the last launch of the Designated Launch Grid and before the task is opened, the CD shall determine that all pilots in the Designated Launch Grid have a reasonable opportunity to start. If each contestant within the Designated Launch Grid does not have a reasonable opportunity to start, the CD shall call a no contest day. The determination of reasonable opportunity shall be made by the CD alone and cannot be challenged.

7.3 Opening the Task

The task shall be opened by the CD within a reasonable amount of time following completion of the last launch of the Designated Launch Grid. The time interval between the last contestant launched in the Designated Launch Grid and task opening will be determined by the CD and shall comply with Rule 7.2. The CD shall provide advance notice of task opening by an announcement on 123.3 MHz, "Task will open in ten minutes." The task opening shall be announced by the CD on 123.3 MHz: "Task is now open."

7.4 Start Criteria

Following the task opening and after release from tow, a valid start occurs each time the contestant's track log shows the glider exits the start cylinder, provided that at least one track log fix exists within the start cylinder preceding the exit from the cylinder. For each valid start, the start time and exit location from the start cylinder shall be determined by the scorer by interpolating between the latest fix within the start cylinder and the next fix outside the start cylinder. The credited leg distances are calculated in accordance with Rule 12.3. The scorer shall use the best scoring valid start.

7.5 Penalty Start

A contestant may claim a start without a fix recorded within the start cylinder after the task opens if the closest fix is within 1 mile of the start cylinder. Such a start incurs a penalty. See Rule 13.5 to determine the penalty.

8 FLIGHT RULES

8.1 Thermalling Direction

All thermalling shall be to the left within the start cylinder(s) and MAT cylinders. Left turns are not mandatory within TAT cylinders.

8.2 Visual Flight Rules

Contestants are required to comply with FAR Visual Flight Rules.

8.3 Communications

Pilot and crew radio transmission shall be confined to position reports, crew instructions, pilot-crew relays, finish communications, surface conditions and matters of safety.

Reports or discussions on soaring conditions or task information are prohibited.

Pilot/crew communications on the start/finish frequency are subject to penalty by the Competition Director.

9 FINISHING PROCEDURES

9.1 Finish Cylinder Entry

The finish cylinder normally will be centered on the contest site runway, and will normally be at least 1 mile in radius, but shall be determined by the CD. When approaching the finish cylinder and approximately four minutes away, the contestant shall transmit on 123.3, "Call sign, four minutes from a direction, i.e. southeast, west, etc." As the 1-26 enters the finish cylinder, the contestant shall transmit on 123.3 their ID and the intended traffic pattern for landing. The finish cylinder has no minimum altitude.

9.2 Landing

The contestant must land within ten minutes after finishing the task or a penalty may be applied. The best scoring entry of the finish cylinder shall define the task finish.

9.3 Relaunch

A contestant may make another attempt at the task after finishing the task, on landing back without task completion, or after an auto retrieve after landing out.

An additional attempt to fly the task is not permitted after a flying retrieve (aerotow or ground launch).

10 FLIGHT DOCUMENTATION

10.1 GPS Documentation

The GPS generated track log(s) will provide the principal documentation of the flight.

The landing may be supplemented by ground timing at the contest site.

All contest time functions such as recording of task opening, grid time, launch time, and landing shall use GPS clocks. All distances shall be in statute miles.

10.2 Downloading Track Logs

Track log downloads of non-FAI secure loggers must be performed by the Scorer or the Scorer's designee. Generally, contestants may use any GPS data logger capable of recording time and horizontal position in IGC format. However, the Contest Director may require the use of data loggers that also record altitude where there is a possibility of violating the FARs by penetrating controlled airspace. If a data logger records both satellite and pressure altitude, the pressure altitude record will be the primary data source for flight evaluation. For data loggers recording only satellite altitude, the calculated equivalent pressure altitude will be used absent any other pressure altitude data record. Contestants may be required by the Scorer to furnish any software

or connection hardware necessary to download their data logger. Contestants may submit a download file of the track log on media at the Scorer's discretion..

10.3 Tampering

All flight logs are subject to security and tampering assessment. Any log that, in the scorer's judgment, has been tampered with will be disregarded and the contestant scored as DNC for the day.

10.4 Task Credit

For task credit, the track log shall record the start, the pertinent turn points in the sequence claimed or assigned in accordance with the turn point credit rules, the finish cylinder entry and landing.

10.5 Restricted Airspace

A contestant will receive a DNC for the contest day if the track log indicates that the contestant entered Class A, B, C or active Restricted or Prohibited airspace.

The scorer shall use the best available data for the determination of airspace violations.

A pilot will receive a DNC for the day if the track log contains no altitude data and the CD deems it likely that FL180 could be achieved. Gaps in the flight record do not infer an airspace violation.

10.6 Landing Cards

Landing cards and track logs must be turned in to the scorer or his designee within one hour of landing at the contest site, or as soon as possible after an out landing, but not later than the next pilots' meeting. The landing card shall list all turn points claimed in the proper sequence and the coordinates of the out landing location, if applicable. Turn-in time for landing cards will be recorded.

10.7 Availability of Documentation

All track logs and landing cards shall be available for inspection by the contestants.

11 LAND OUTS

11.1 Required Call-in

Contestants who land out shall promptly call Championship Headquarters giving all information specified on the landing card and, for MAT tasks, the intended destination prior to landing. Another call to Championship Headquarters shall be made advising that pilot and crew are together. Calls can be made by radio if receipt by Championship Headquarters is acknowledged.

11.2 Verification of Landing Site

If a logger failure is suspected, the contestant shall record the name, address, and telephone number of a witness on the landing card. The contestant's crew cannot serve as witnesses. The contestant shall record the latitude and longitude of the landing location as accurately as possible by available navigation aids, such as GPS or current sectional chart.

12 SCORING

12.1 The scoring formulas and terminology are described in Appendix A.

12.2 Re-scoring

Re-scoring of contest days may be considered only (i) if errors or ambiguities are discovered in the rules, or (ii) if errors are made in scoring one or more contest pilots. In

case of (i), corrections shall be made by majority vote of the Competition Director and competing Association Officers and Rules Committee members. Written corrections shall be distributed to contestants as soon as possible and be effective for the entire duration of the competition. In case of (ii), errors discovered during the competition should be communicated to the Scorer, who has full authority to make corrections. If scoring errors are discovered after the end of the competition, a contestant must submit a written request for re-scoring within 14 calendar days after the last day of scheduled competition. The request must support the change of one or more contestant final places (top three individual and top three team places), and be submitted to the Association President, Rules Chair and contest Scorer for review. Any scoring changes determined by such review shall be made promptly and published for the membership.

12.3 Calculations

Credited flight distance shall be determined by using the WGS – 84 ellipsoid. Final individual pilot scores shall be the total of the daily points earned. Final team scores shall be the total of the daily points earned by the team. No pilot of a team may score more than 70 % of the contest days during the Championships.

If more than one team pilot competes on the same day, the team will decide which flight should be used. Final score ties are resolved against the pilot with the lowest score on any Contest Day.

12.4 Completed Task Distance

Task distance is calculated from the start cylinder exit location through each properly credited turn point or turn area to the entry location of the finish cylinder. At each credited turn point or turn area, the scorer shall determine the fix that, in combination with other fixes, gives the contestant the greatest credited distance. Each such fix, termed a control fix, is used as the terminating point of one task leg and the initial point of the subsequent leg. If only the penalty zone (Rule 13.4) is penetrated, only the control fix within the penalty zone shall be used for leg distance calculations. If the turn point or turn area cylinder is penetrated, only the control fix within the cylinder shall be used for leg distance calculations.

12.5 Uncompleted Task Landing Point

For uncompleted tasks, a scored landing point shall be determined by the Scorer. This is generally the track log fix that yields the greatest scored distance. In case of data logger failure, the pilot shall pinpoint for the Scorer the landing site on a sectional chart and have a witness verify the landing point. Flight claims are subject to verification.

12.6 Uncompleted Task Distance Calculation

Task distance is calculated from the task start cylinder exit location through each properly credited turn point or turn area to the end of the uncompleted leg, minus the distance from the landing point to the end of the uncompleted leg. If the latter distance is greater than the uncompleted leg, distance credited is the sum of the lengths of all the legs completed in proper sequence.

13 TURN POINT CREDIT AND PENALTIES

13.1 Turn point and Turn Area Credit

A contestant shall receive credit for reaching a turn point or turn area if the track log shows the nearest fix is no more than 1 mile outside of the turn point cylinder or turn area cylinder.

13.2 Assigned Turn Points and Turn Areas – Penalty

If the nearest fix is greater than 1 mile outside of the turn point cylinder perimeter or turn area cylinder perimeter, the contestant's score shall be computed as if a landing were made at the coordinates of the nearest fix.

13.3 Pilot Selected Turn Points (MAT) – Penalty

If the nearest fix is greater than 1 mile outside of the turn point cylinder perimeter, the contestant's score shall be computed as if the turn point was not achieved.

13.4 Turn Point and Turn Area Penalty Zone

A penalty is assessed when the contestant's nearest fix is greater than zero and equal to or less than 1 mile outside of the turn point cylinder perimeter or turn area cylinder perimeter. A penalty of one point per each whole 0.02 miles from the cylinder perimeter shall apply.

13.5 Penalties

The Contest Director shall apply penalties for the following:

- Unsafe flying or unsportsmanlike conduct.
- A 50 point penalty for failure to turn in track log and required landing card within an hour of finishing or landing back without a finish. The CD may exercise discretion in assessing this penalty.
- A 50 point penalty for failure to comply with the landing time interval.
- All points earned by a single team pilot on more than 70% of the contest days shall be deducted from the team entrant's score.
- The Start Penalty is calculated as follows: (Start Distance in miles - Start Cylinder Radius in miles) X 200 points. The following shall be determined:
 - Start Fix: The contestant fix that is closest to the start cylinder after the task is opened.
 - Start Distance: The distance, to the nearest 0.1 miles, from the Start Point to the Start Fix.
 - Start Time: The time of the Start Fix
- A daily penalty cannot be greater than the contestant's daily score i.e. cannot result in a daily score less than zero.

14 AWARDS

The sponsor will provide awards for the top three positions in both the individual and team categories. 1-26 Association Perpetual Awards will be made to contestants credited with the following achievements in the annual 1-26 Championships.

THE MARION C. CRUCE TROPHY - Individual pilot with highest final score.

THE BOB McNIELL/FRED CUNY MEMORIAL TEAM TROPHY - the team pilots with the highest final score.

THE PRESIDENT'S TROPHY - The pilot with the fastest flight. In the event of a tie, the trophy is awarded to the pilot with the highest total Championship score.

THE OLD GOAT TROPHY - The pilot with the highest average daily score who has celebrated his/her 60th birthday on or before the start of the Championship. The candidate must have flown at least 30% of the Contest Days.

THE DAVID C. JOHNSON MEMORIAL TROPHY - The pilot with the highest average daily score who is flying in the 1-26 Championships for the first time. If a team member, the candidate must have flown at least 30% of the contest days. All members of the team are co-winners with the trophy so inscribed.

THE VIRGINIA M. SCHWEIZER TROPHY - the female pilot who has the highest average daily score. The candidate must have flown at least 30% of the Contest

Days. The award is presented only in those competitions in which two or more women pilots are entered.

THE JOHN P. GREENE MEMORIAL TROPHY - The pilot under age 30 (at the end of the Championship) with the highest average daily score. The candidate must have flown at least 30% of the Contest Days. A pilot over the age of 21 shall not be eligible to win this trophy, if he/she has won the trophy in a prior year and another contestant is eligible.

THE OLD TOAD TROPHY - The pilot with the highest final average daily score, who has celebrated his/her 70th birthday on or before the start of the Championship. The candidate must have flown at least 30% of the Contest Days. The OLD TOAD winner is also eligible for the OLD GOAT TROPHY.

Appendix A: 1-26 Championships Scoring System

Scoring Nomenclature

- D - A Contestant's credited flight distance.
 - Db - The best credited flight distance of all the contestants.
 - DNC - A Contestant with a credited flight distance of less than 5 miles or a violation of rule 10.5. Such a Contestant receives zero points for the day and is not considered to have attempted the task. See Rule 4.1.
 - DVb - The credited flight distance achieved by the fastest finisher.
 - FR - Finisher Ratio = # of finishers/ # Contestants with 5 or more miles credited flight distance.
 - LR - Land Out Ratio = # of land outs/ # Contestants with 5 or more miles credited flight distance. The term "land outs" above shall include all non-finishers with 5 or more miles credited flight distance.
 - MTD - Minimum task distance set by the Competition Director
 - MTT - Minimum task time set by the Competition Director.
 - Finisher - A Contestant with a completed task, provided the credited flight distance equals or exceeds the MTD.
 - T - A finisher's elapsed time in hours from the finisher's official start time to the finisher's finish time, but not less than the MTT.
 - V - A finisher's speed.
 - Vb - The speed of the fastest finisher.
 - VsP - The score of the slowest finisher before subtraction of penalties.
 - Scoring Equations - MAT and TAT .
 - $V = \min (D/T, D/MTT)$.
 - Score for finishers: $\text{Score} = 1000 \times ((V/Vb \times FR) + LR)$.
 - Score for non finishers when there is at least one finisher: $\text{Score} = .99 \times VsP \times \min (1, D/DVb)$.
 - Score if there are no finishers: $\text{Score} = 1000 \times D/Db$
- Score computations
- Landing point coordinates are taken from GPS coordinates verified in the track log or in case of logger failure, provided by the pilot.
 - Task leg distances and achieved distances are rounded to the nearest 0.1 statute mile. Times are recorded to the nearest second. Full mathematical precision shall be carried through all calculation steps. Daily cores shall be rounded to the nearest whole number of points as the final calculation step.

- All DNC penalties shall be applied before the scoring process begins. All other penalties shall be applied after scoring computations of speed and distance have been calculated.