

## **By-Laws: Attachment 1 OFFICIAL NWSS CONTEST RULES AND GUIDELINES**

It is a goal of the Northwest Soaring Society (NWSS) to facilitate growth of radio controlled soaring by encouraging participation in soaring competition. To this end, the NWSS has established rules and guidelines for NWSS contests, for determining Season Champions each year and for holding a season end Tournament. Additionally, the NWSS ranks pilots as either Expert or Competitor based on their performance during the season.

### **MODEL CLASSES:**

The following model classes are recognized by the NWSS for the purpose of competition. They may be either a winch launched glider or an electric launched glider.

- 1) Two Meter: Wing span of two meters or less.
- 2) Open: Unlimited wing span.
- 3) RES (Rudder, Elevator, and Spoiler): 3 function only, no moveable trailing edge. Unlimited wing span.

### **CONTESTS:**

- 1) MODEL CLASSES:

Only those model classes advertised in the contest flyer are to be flown in a contest. Individual exceptions: see rule #4 - Season Championship.

- 2) QUALIFYING CONTEST DAYS:

- a) Three (3) rounds must be flown to qualify the day for Season Championship points for the contestants, however five (5) rounds are desired each day to reduce the luck factor.
- b) A pilot's score does not count towards Season Championship points if the pilot flies two (2) rounds or less per day.

- 3) FLIGHT SCORING:

The following tasks are the most commonly used in NWSS contest.

- a) International Duration: Use the AMA International Duration (Task T1) scoring method with 5 to 10 minute target times.
- b) Simple Duration: Use the AMA Simple Duration (Task T2), however, NWSS rules allow only one minute grace period to land without penalty.
- c) Precision: Use the AMA Precision scoring table (Task T5).
- d) Triathlon: Both the AMA (Task T6) and the Modified Triathlon may be flown at contests. The Modified version has less jagged peaks in the scoring curve than does the AMA version.
- e) Variland: AMA does not recognize this event. It is a 10 minute event where anyone flying 8 minutes and 20 seconds or less can get a maximum of 900 points with a perfect landing or 1000 points with 10 minutes and a perfect landing.
- f) Speed: Defined by 1991 SMT rule proposal as stated in Feb. 1991 Model Aviation. You get 125 points for each 150 meter leg completed of the 2 circuit course and a percentage of 500 points based on the winners time divided by your time. For those pilots not wanting to do a speed run, they may do a 3 minute precision instead. The 3 minute option must be declared prior to starting the round. Ballast must not be changed from that used in the prior or following rounds.
- g) Cumulative Duration: Use the AMA Task T4 scoring method. Typically three flights are flown to get a maximum time (anywhere from 15 to 30 minutes), but the actual number of flights and the cumulative time

are determined by the CD. Each flight might have a maximum time at the CD's discretion. If all rounds are not completed for any cumulative duration task during the contest day, then none of the rounds will be counted for NWSS scoring.

- h) The contest director may include special events for determining the results for his contest (or just for fun). If the event can be normalized to 1000 and meets other NWSS criteria it will count for NWSS season points as well (i.e.: distance) if the CD chooses to send in the scores for such events.

Unless the CD states otherwise, all the events flown in a contest are scored and used to determine the winner. Each day's scores are then used to generate Season Championship points, as described elsewhere.

4) LANDING SCORING:

- a) Spot landings: AMA landing L4: 25 foot radius 1 point per 3 inches, 100 maximum.
- b) Landing lines: AMA Landing L6: 50 foot line, 1 point per inch, 100 maximum.

Option 1: Landings beyond a perpendicular line to the 50 foot line will result in 0 landing points.

Option 2: Measure from the end of the line to the nose. (Radius method)

5) NORMALIZING SCORES:

Each flight is normalized to 1000 points. The flyer's raw score (1 point per second plus the landing usually) is divided by the perfect score then multiplied by 100. This is AMA option 2 "Normalization of the ideal score." This score is also referred to as "percent of perfect".

6) TIMERS AND TIMING:

NWSS timing methods are basically the same as those of AMA. However, in our contests the helper and the official timer are one and the same and can provide any sort of countdown that the pilot requests. Also, unless the CD specifically states otherwise, the pilot can choose anyone as a timer.

7) LAUNCHING:

- a) NWSS follows the AMA guidelines recognizing that the aircraft on tow has the right of way over aircraft in flight. However, NWSS supports the decision that one, or both, may be given a reflight at the discretion of the CD.
- b) The handling of pop-offs (the inadvertent release of the aircraft from tow before reaching full launch height) also varies greatly from contest to contest. Some re-launches may be allowed, but the ruling is at the sole discretion of the CD.
- c) Re-flights necessitated by an explosive launch (as in ZOOM - KABOOM) are also at the sole discretion of the CD.

To avoid confusion and hard feelings during a contest, the CD should spell out beforehand how he will handle these circumstances, should they occur. If he does not, ask at the pilots meeting.

8) MISCELLANEOUS:

- a) A round of flying must be completed on the same day. If not, those who did fly will lose the points for that round.
- b) If the contest director determines that the winches be moved before a round of flying is completed, any pilot flying prior to the move will be allowed the option to re-fly his flight and count the re-flight.
- c) "Mini" contests run as an afterthought (i.e. after) at a regular contest will not count toward Season Championship points.
- d) The use of variometers/altimeters ("thermal sniffers") providing real-time feedback to the pilot is not permitted at NWSS contests.

**SEASON CHAMPIONSHIP/SEASON POINTS:**

Awards shall be given at the end of each season to top performing pilots in Open Class, Two-Meter Class and RES Class. The Season Champions in each class shall be determined as follows:

- 1) Season points are calculated for each contest day. Eight (8) contest days must be flown in Open Class to qualify for Season Champion in that class. Six (6) contest days must be flown in Two-Meter Class or RES Class to qualify for Season Champion in those classes.
- 2) For each class (Open, Two-Meter, RES), a contest day is scored by dividing a flyer's score by the score of the highest finishing NWSS plane, regardless of class, and multiplying it by 100.
- 3) Season championship standings are determined by the average of the eight (8) highest scoring contest days for Open Class, the average of the six (6) highest scoring contest days for Two-Meter, and the six (6) highest scoring contest days for RES.
- 4) Classes must be specified in the contest notice for that class to be used in season point calculations. EXCEPTION: A pilot desiring to fly a glider in a class not available at a contest may declare to the CD at the beginning of the contest that he/she wants to fly a glider in a class that is not available (i.e. fly RES if it is not available).
- 5) A pilot must be a NWSS member to collect season points. Points will not be counted retroactively should a pilot become a member in middle of the season.
- 6) Season Championship tie breaker: The following procedure will be used to determine the Season Points Champion where pilots are tied for first place in any NWSS flying class, e.g. Open, Two Meter and RES. Ties for places other than first will be awarded duplicate trophies and this tie breaking procedure will not be used. The procedure is only advanced to the next step if a tie remains after completing the comparison of criteria for the tied pilots.

**Step 1: Fly-off at the NWSS Tournament**

If all tied pilots attend the Tournament, a fly-off with aircraft of the class will be used to determine the champion. Participating in the fly-off is not optional. If any pilot is in attendance at the Tournament and is unwilling or unprepared to participate in the fly-off, then he/she will forfeit.

Consistent with the long standing NWSS policy of entrusting broad discretion to NWSS Contest Directors (CD), the CD of the tournament will define the fly-off between the tied pilots. The CD is encouraged, but not required, to consider the following: having multiple fly-off rounds, simultaneous man-on-man launches as frequencies permit and concluding the fly-off on the first day of the Tournament

**Step 2: Days Flown Against Each Other During the Season.**

The results of those days during the season where those pilots flew against each other in the class will be compared. The pilot with the best win / loss record will be declared champion.

**Step 3: Inclusion of an Additional Day in Season Points**

If all pilots in contention flew at least one more day than the number of days used to compute season points for the class, the results of an additional day will be included in the computation of season points. The pilot with the highest season points including the additional day will be declared champion.

**Step 4: Percent of Perfect Comparison**

The top 8 percent of perfect days will be compared. A pilot's top percent of perfect days may not necessarily be the same as his top season point's days.

**Step 5: Co-champions**

In the unlikely event that a tie remains after completing the previous steps, the tied pilots will be declared Co-champions.

- 7) Any official NWSS contest held in the fall after the NWSS Tournament will count towards the following year's season points.

**STEVE YURCHEVICH MOST IMPROVED PILOT AWARD:**

The recipient of the Steve Yurchevich Most Improved Pilot Award shall be determined by a vote of the NWSS Board at the end of each season. Any pilot flying six (6) or more days in the current year can qualify for consideration for Most Improved Pilot (MIP). The change in season points average for all days flown (current year's average minus last year's average) will be computed for pilots who flew at least 6 days in the current year and at least 6 days in the previous year in any given class. A pilot who flies multiple classes will have this value computed for each class. The 3 pilots with the greatest change in Open Class, the single pilot with the greatest change in Two-Meter Class, and the single pilot with the greatest change in RES Class will make up the candidates for MIP. The NWSS Scorekeeper will provide the Board with the candidates' current and previous year's scores to assist the Board in their final decision.

**PILOT CLASS PERFORMANCE STANDARDS:**

Pilot classes are defined in terms of how a pilot's modified season point's average compares to a predetermined break point. The break point for the following year is set by the board at the year end board meeting.

- 1) Expert Class: Those pilots flying a season points average that equals or exceeds the break point.
- 2) Competitor Class: Those pilots flying a season point's average that is less than the break point.
- 3) If a pilot is an "Expert" in any one model class then the pilot is also an "Expert" in all other classes.
- 4) For a Competitor to move to Expert Class, he/she must have flown eight (8) or more contest days in at least one of the following classes — Open, Two-Meter or RES — and his/her season points average for the best eight (8) days in one of these classes must exceed or equal the break point of 88 points. Additionally, the pilot must have won Competitor Class at least once, in the current season or in a previous season, at an NWSS contest. Competitors will be moved to Expert Class at the end of the season. Alternatively, any Competitor Class pilot who qualifies for the finals at the NWSS Tournament will be given the option to move up to Expert Class if they desire, even if they have not flown 8 days or met the break point. Otherwise, an existing NWSS Competitor will not be allowed to simply declare himself/herself an Expert.
- 5) An Expert pilot may petition the board to be reclassified as a Competitor if his/her season points average falls below the break point. This must be done before the new season starts.
- 6) Returning pilots who have not flown for 3 or more years will be classified as Competitors.
- 7) A pilot who currently holds Expert status elsewhere will be recognized as an Expert by the NWSS subject to maintaining a running modified season point's average at or above the established break point. Previously unranked pilots will be considered Competitors for their first contest day. If said pilot scores above the break point, he/she will be reclassified as an Expert and remain so as long as their running modified season points average remains above the break point.
- 8) Most contests give awards on the basis of the Competitor / Expert split, but not all do. The contest announcement will state how it will be done. On occasion a contest may give awards for "beginner" or "novice" flyers. These flyers are considered "Competitor" by the NWSS scoring system.

**CHAMPIONSHIP TOURNAMENT:**

The NWSS Championship Tournament was established as a season ending event.

- 1) Tournament competition will not be counted in season championship point calculations.
- 2) Qualifying rounds will be flown Saturday and until approximately noon on Sunday.
- 3) Championship rounds, taking place Sunday afternoon, will be flown by the top pilots from the qualifying rounds. There shall be a minimum of 10 pilots in the championship rounds, with the exact number determined by the CD and/or the NWSS Board of Directors. The number of pilots advancing to the championship rounds will be announced in the Tournament flyer.
- 4) The Silver Cup will be awarded to the flyer age 70 or older with the highest score at the end of the first day of the Tournament.

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- 5) The top Competitor will receive trophies based on the preliminary round scores.
- 6) Team trophies will be given (3 flyers per team) for highest scoring team. Team members will be determined by the Tournament registrar or an assistant so as to balance the aggregate skill of the pilots on each team to the greatest extent possible. The scorekeeper will provide the registrar with season point's standings for all pilots attending the Tournament to assist with this task.
- 7) The top placing RES pilot will be awarded a trophy based on the preliminary round scores.

## DOCUMENT REVISIONS

Revision A: August 31, 2001

Major rewrite of existing rules.

Revision B: March 28, 2002

Continuation of major rewrite; rules compared against board meeting minutes (1995 to present) and adjusted to reflect actions taken by the board.

Revision C: February 2007

Part c (Hunski landing) added to CONTESTS section 4 (Landing Scoring).

Part d (thermal sniffer exclusion) added to CONTESTS section 8 (Miscellaneous).

Modified the following sections of SEASON CHAMPIONSHIP/SEASON POINTS to modify scoring.

- Sections 1 and 3, changed the number of days for 2-Meter and RES class to six (6).
- Section 2, changed scoring to be calculated by dividing raw scores for *all* classes by the *top scoring NWSS plane, regardless of class.*
- Section 4, delete sentence regarding calculating against highest finishing NWSS pilot (now redundant).

Modified the following sections of PILOT CLASS PERFORMANCE STANDARDS to be in line with the SEASON POINTS changes listed above.

- Delete section 1 (definition of "modified season points"). Renumber remaining sections.
- Sections 1, 2, 4 and 5 (formerly sections 2, 3, 5 and 6), delete the word "modified."

Delete requirement that CD determine if glider is unflyable from CONTEST Section 2b.

Modify PILOT CLASS PERFORMANCE STANDARDS Section 4 (formerly section 5) as follows:

- Add "of 88 points" to include the numeric value of the break point in the rules.
- Add alternative way for pilot to move to Expert Class by qualifying for finals at the tournament.

Add "based on the preliminary round scores" to CHAMPIONSHIP TOURNAMENT Section 5 for clarification.

Change CONTESTS Section 3e (Variland) from "anyone flying 9 minutes or less" to "anyone flying 8 minutes and 20 seconds or less" to correctly reflect scoring tables.

Revision D: March 2011

Modified CHAMPIONSHIP TOURNAMENT

Add Section 7 The top placing RES pilot will be awarded a trophy based on the preliminary round scores.

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Under **MODEL CLASSES:**

Added: They may be either a winch launched glider or an electric launched glider.

4) LANDING SCORING:

Deleted Paragraph c) The Hunski

Modified CHAMPIONSHIP TOURNAMENT

Paragraph 4) changed Silver Cup age from 62 to **70**.

Paragraph 5) revise the paragraph to read “Top Competitor will .....

Paragraph 6) extensive revision to the paragraph to have only one team trophy.