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AMA Competition Regulations Rules Change Proposal Form

The current issue of the Competition Regulations must be referenced.

Proposal Number: RCA24-06

Received Date: 3/14/2023

Revised Date:

Version Number:

Proposal Type:

Basic

Original proposal number.

Applicable Competition Regulations this proposal relates to:

RC Aerobatics

Give Brief Summary of the Proposed Change:

Updated Format for Contests

State exact wording proposed for the Competition Regulations. List paragraph number where applicable. Example: Change "quote present rule book wording" to "exact wording required".

Replace Section 13 with the following:

13. Determining the winner

In each class, only completed rounds in which all entrants in that class have flown or have had official opportunity to fly under the rules set forth in Paragraph 10, shall be counted. Individual classes competing at the same event may fly differing numbers of rounds to determine the winner based on class size. Any deviations from the Contest Format based on class size below should be published in the Contest Event Description.

Each flight score shall be normalized in the following manner. When all contestants for a class have flown in front of a particular set of judges once, the highest score shall be awarded 1,000 points. The remaining scores for that set of judges are then normalized to a percentage of the 1,000 points in the ratio of actual raw score over round winner's raw score multiplied by 1,000.

Sy Score $Y = \frac{S_y}{S_w} \times 1,000$

S_w

Score y = points awarded to the contestant

S_y = raw score of the contestant

S_w = raw score of winner of round

For example: A total of 10 contestants are entered in Sportsman. After all 10 have flown in front of judge set A, the winner of that round has a raw score of 81. He/she will receive 1,000 points. Competitor Y has a raw score of 75.75 divided by 81 multiplied by 1.000 equals 925.9 points which is Y's score.

Note: If a class (example here Sportsman) is split between two (2) lines, the score can only be normalized after the second round when all 10 have flown in front of judge set A.

The Contest Director may elect to use Tarasov-Bauer-Long (TBS) statistical averaging scoring system for any class assuming there are at least 5 competitors and 5 judges.

13.1. Classes with 15 or less contestants

The winner shall be the only flight score when only one (1) round is flown; the highest total of the best two (2) flight scores when two (2) or three (3) rounds are flown; the highest total of the best three (3) flight scores when four (4) rounds are flown; the highest total of the best four (4) flight scores when five (5), or six (6) rounds are flown; the highest total of the best five (5) flight scores when seven (7) rounds are flown; and the highest total of the best six (6) flight scores when eight more rounds are flown. Points from repeat flights may not be added to earlier flights. Each flight is complete in itself. In case of ties, the best non-scored flight of the contestant shall be used to determine the higher placement. For all AMA classes, all judge scores are to be included in the tabulation of scores regardless of the number of judges used.

13.2. Classes with 15-30 Contestants

At large contests such as a National level contest, the number of contestants may exceed the time available to run a complete round in front of the same judges at the same site. While the pilots are judged by the same judges in each round, the duration of judging and moving between sites may cause fatigue bias in the scoring. In this case, the contest will use a preliminaries/finals format to allow the top scoring pilots to fly head to head in front of the same judges under the same conditions. The number of preliminary rounds will be decided by the CD based on the event schedule. The scoring for the preliminary rounds will follow 13.1. The top 33% of pilots in the event (round up) will continue to the finals rounds. The number of finals rounds, N_f , is also at the discretion of the CD, determined before the contest based on the event schedule. The finals pilots will carry into the finals their preliminary rounds total score divided by the number of rounds contributing to that score. For example, if there were 6 preliminary rounds, the pilot's preliminary score would be their top 4 rounds divided by 4 (effectively their average score). The finals pilots will fly N_f finals rounds and score will be the preliminary round average score plus the top $N_f - 1$ finals rounds score (the lowest finals round score, per pilot, is dropped). The finals pilots are then ranked by this final score to determine the winner.

For example, a pilot's preliminary round average score is 980. In the finals, 3 rounds are flown and the pilot scores 1000, 1000, 990. The pilot's final score is 2980 (the 990 finals round is dropped and the pilot is forced to keep their preliminary round average score, regardless of scores in the finals rounds).

13.3 Classes with greater than 30 Contestants

The Matrix system is intended for use in situations where the number of contestants exceeds that which can be run on 1 site, in front of 1 set of judges, and within the time limitations of the event. For example, the Masters class at the NATS often falls into this category. Pilot Groups and Seeding: The contestants shall be grouped by seeding the top 16 contestants using their finishing positions at prior year's Nationals, irrespective of class. The ED shall determine the seeding using this, and any other means they

deem appropriate. The final seeding is ultimately subject to the EDs discretion. The seeding of the contestants shall be published and made available upon request no later than the end of the Pilot's Meeting held the day prior to the start of competition.

Each pilot group shall be populated as follows: Pilot Group A: Seed #1, Seed #8, Seed #9, Seed #16. Pilot Group B: Seed #2, Seed #7, Seed #10, Seed #15. Pilot Group C: Seed #3, Seed #6, Seed #11, Seed #14. Pilot Group D: Seed #4, Seed #5, Seed #12, Seed #13. The remaining contestants shall be evenly divided among each group, keeping the total number of contestants in each group as even as possible. The explanation, construction and scoring instructions for the Matrix system are in 13.3. Where possible and practical, each contestant will fly 6 matrix rounds. Finals format: If a Finals event is included, the number of finalists will be 20% of the total or a practical number to match the time available. The Finals format is also subject to the time available. The CD can opt to run a 4 round final, or a 3 round (or less) final. To allow for weather issues, the best 1 of 1, 2 of 2, 2 of 3, or 3 of 4 normalized finals scores will decide the winner. Equal judging exposure will be applied and only completed rounds will be counted in the final standings.

***Continue with the existing section 13.3 The Matrix system, however, remove the following paragraph as this is now covered in section 13.2:

//remove

Conventional Non-Matrix Judging: In the event that the seeded groups are small enough, the Event Director may elect to utilize conventional, non matrix judging spread out over two sites with equal judging exposure. If this preferred method is feasible, the preliminaries will be scored as detailed in 13.1. It is suggested that seeded groups be utilized in the same fashion as the matrix system with only one flight line operating on each of the two sites. When all of the contestants on Site 1 have been judged by the first set of judges, those judges would then report to Site 3 and judge the remaining contestants to complete the round. The second set of judges who originally started on Site 3 would likewise report to Site 1 to judge the remaining contestants to complete a second round.

The decision to utilize matrix or non-matrix judging rests solely with the ED.

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Section 13.4 FAI Events

FAI Events will be run aligned with the contest format for a World Championship event as published in the FAI Sporting Code with the following exceptions:

- 1) The number of competitors that advance to Semi-Finals and Finals will be at the discretion of the CD and communicated before the contest begins. For example, at the Nats event, if 25 contestants participate, the CD can determine that all 25 contestants advance to the Semi-Finals and also decide the number of Finalists.
- 2) The Finals round will only be used at the Nats or a contest determined to be a Team Selection.

State logic behind proposed change, including alleged shortcoming of the present rule(s).

Over the last several Nats, the contest format has evolved to continue to have a Finals format for Masters while adapting to the decreasing number of contestants. This rule change defines a modern format for classes with 15-30 contestants.

The contest format, especially at larger contests, needs to be adapted to smaller contest sizes, especially for the Nats, while staying aligned with the expectations and traditions of the community. The number 15 was chosen as the cutoff between formats as that is the max number of flights that can feasibly be

flown in front of one set of judges in a 2 hour block of time, which is the typical round schedule at the Nats.

In addition, this rule change sets the expectation for how FAI events are run, including at local contests. In summary, these changes are designed to enable the contestants to better understand the format and allow them to effectively prepare for the contest.

If this proposal is for a new event, include all event test data/information here. Please provide information on what testing of this new event has taken place to include number of participants and number of contests.

State effect, if any, on current AMA records:

Note: The Contest Board Chairman may, in coordination with the submitter of the proposal, at any time prior to submitting a proposal to the contest board for Final Vote, edit proposal wording to increase clarity and to avoid ambiguity, provided the proposal intent is not changed.

Submitter Information:

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