

# **SRAC Electric Pylon Racing Rules**

**OBJECTIVE:** To provide a racing event using an electric motor powered airplane that can be raced safely using the AMA Half-A course.

**GENERAL:** All AMA and FCC regulations shall apply except as noted herein. Each contestant shall be allowed two (2) airplanes, the second to be used only if the first is judged to be unserviceable. Unsportsmanlike behavior will be cause for disqualification.

**RADIO GEAR:** Any legal radio may be used. A minimum of three channels are to be actuated: elevator, ailerons and electronic speed control, or elevator, rudder and electronic speed control.

**MOTOR:** Pilots who fly commercially available "low wing area" models will use a brushless motor using a 20 amp or greater speed controller capable of turning a 5.0 X 5.0 propeller at a maximum speed of 18,500 rpm static. Pilots who wish to race in this class using a SRAC Modified Airframe 423 1/2A glow model (such as the GLH, or any glow model meeting the airframe restrictions as outlined in AMA Event 423) may use any brushless motor and 35 amp or greater speed controller capable of turning a 5.0 X 5.0 propeller at a maximum speed of 23,500 rpm static. The CD will have discretion to allow or disallow models in either configuration

**AIRPLANE:** The airplane airframe is open (except for AMA 423 event planes). However, the airplane-designed wing loading must provide a safe and sane hand launch, landing approach and touchdown. The Contest Director will judge any marginal designs for safety. In addition the airframe should be "conventional design" with a forward wing, aft horizontal stabilizer and a single motor mounted in front. See applicable AMA R/C Pylon Race Rules: "Conventional Design".

**PROPELLER:** APC 5.0 x 5.0 propellers will be used for both "low wing area" models and for AMA 423 event planes. Propeller size and pitch may be altered at the conclusion of a day's racing with approval of the Contest Director.

**BATTERY:** Airplanes in this class will use a 3S Lithium Polymer battery pack. No limit on Mah capacity.

## **RACE OPERATIONS:**

- a. Races will be run over the Half-A course
- b. A maximum of four (4) planes per heat.
- c. All launching by hand. Note that launching directly through the start line is prohibited. Motors must be started and airplanes launched in time to enter the hold pattern ready for the flying start.
- d. Each heat will consist of ten (10) complete laps beginning with a flying start at pylon No. 2; the start and finish line will be between pylons 1 & 3 in line with the race officer.
- e. If a contestant cuts a pylon he will fly one (1) extra lap, if he cuts twice he will be disqualified from that heat.
- f. A contestant who has not launched before the leader completes (5) laps is disqualified from that heat.
- g. All laps will be flown counterclockwise.

## **SCORING:**

- a. Scoring will be – first place, 4 points; second – 3 points; third – 2 points; fourth – 1 point. Each race day total may be normalized to the maximum possible score for that day.
- b. Any contestant who does not attend an official race day will receive a score of zero (0) for that day. Cancelled race days are not included in any of the season scoring results.
- c. Contestants will drop their lowest score after two or more race days.

**EXCEPTIONS:** There will be no exceptions to the above rules. (Other than under conditions of extreme urgency or at the discretion of the Contest Director on a one-time basis.

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