

# MMM Outdoor Scramble Rules

Draft 6C: 18 Apr 2026

**References**

- A: Canceled Scramble Procedures
- B: AMA Outdoor Free Flight Rules
- C: National Free Flight Society Official Competition Rules
- D. Flying Aces Club Rule Book
- E. FAI Sporting Code Vol. 1
- F. NFFS Website, ([freeflight.org](http://freeflight.org)) submenu Flying Competition/Free Flight Competition Rules, where links to Refs B through E may be found conveniently.

**Tables**

- A. Maxes and Engine Run Times for Cat II and Cat III
- B. Scramble Score Sheets

## I. Background

**1. Purpose of the Scramble** The Scramble is a contest in which contestants flying models of disparate class may compete head to head with each other. Despite there often being an insufficient number of contestants in any class to compete with others flying the same class of model, the Scramble format has proven to be a viable and enjoyable alternative to within-class competition.

**2. Fundamental adjustments with this rewrite** Two major adjustments are being made with this updating of the Scramble rules. The first is that, in response to observations that compliance with class rules was at best uncertain, the club is opting to apply to the contest as much fidelity to “rules as written” for each class as possible. Though a certain simplicity about the Scramble may be reduced, the clarity gained by complying with event rules for each class is hoped to be more than compensating. More about this under **The Monthly Contest** below.

The second major adjustment to the previous Scramble format has to do with annual, season-long event. Previously, by virtue of the scoring system, a single exceptional day at the field by an individual had the potential for rendering the season-long competition moot for many competitors. Admittedly, historical analysis of our contests has shown that the club hasn’t often run into such an issue, but the potential exists. Therefore, in the calculation of running scores for the season-long contest, the gap between 1<sup>st</sup> place and 2<sup>nd</sup> place will capped at two maxes for each month’s Scramble. Time will tell whether this proves to be the optimal formulation, but it’s hoped this will provide tighter annual contests while still honoring and valuing superb performances. **The Annual Contest** (below) elaborates.

Finally, it’s recognized that free flight technology—particularly with regard to electric-powered models—has changed the landscape enough that some of the language of the previous edition of Scramble Rules may not fully have accommodated current free flight situations.

The Scramble Rules Rewrite Committee, and the club itself, owe a huge thank you to the authors of the previous rules not only for providing a durable framework that’s served as the basis for monthly contests for many years, but also for serving as a springboard for what’s hoped to be a significant step forward.

**3. Record Setting** Nothing in these rules is intended to alter any competitor’s approach to record setting. All record setting attempts must be in full compliance the appropriate governing body’s rules for that event.

## II. The Monthly Contest

### 1. Administration

**Sanction:** Scrambles are AMA-sanctioned contests, which provides official status for national contests (National Cup, America's Cup), or for record-setting. Sanctions are normally arranged by the President at the start of the season.

**Number of Scrambles:** There shall normally be seven scheduled Outdoor Scrambles, taking place in April, May, June, August, September, October and November. The July Scramble typically is not run due to the club's schedule being dominated by the 14-Rounder contest as well as other major contests elsewhere.

**CD's Duties:** CDs must be AMA-qualified as such, and must be willing to manage Scrambles to a high level of safety, professionalism, and administrative completeness. This includes, but is not limited to, field security, entry fee collection, verification of contestant AMA status, score sheet management, score calculation, end-of-day recognition of the winner, and timely completion of the CD Checklist. The CD Checklist helps CDs manage outside reporting requirements, write-up of the day's event for the newsletter, and score reporting for the Annual Scramble Contest. CDs must be conscious of weather considerations both from safety and flyability perspectives. The Canceled Scramble Procedures (Ref. A) pertain.

**Entry Fee:** As of the 2024 season, the contest fee is \$5 per Scramble, which may be paid at the field in cash, or by Paypal (themmmffclub.com). Alternatively, a member may pay for the entire season (\$35) at the outdoor season's start. Proration is possible for those joining the outdoor season after the first scramble, but refunds are not. Non MMM AMA members will be charged \$10 per scramble.

**Eligibility:** Contestants must be AMA members in good standing to participate officially in the contest.

### 2. The Contest Day

**Hours:** Official flights will normally commence at 0900 and end at 1700, barring weather considerations. The notable exception to this is the club's Late Day Contest, which is a Scramble taking place around mid-Summer or early Fall in which official flights may take place until sunset.

**Field Category:** Field Category is understood to be Category II, unless, in the CDs judgment, observed or forecast weather suggests flying to Category III times and limitations. The decision is the CD's alone, though he or she may poll contestants as desired.

**Score Sheet:** Flight times and Max times will be entered upon completion of each official flight onto the Score Sheet (Table B), maintained at the CD table. Contestants may self-report, but are encouraged to have the CD verify entries.

**On-field award presentation:** At day's end, scores will be calculated to an extent sufficient to declare the day's winner. A nominal award (typically a sticker) will be presented to the winner at the contest's conclusion.

### 3. Official Flights

**AMA/NFFS/FAC classes** Each non-FAI class will operate in accordance with its respective rules, including progressive max times, motor run times, engine run times, etc. This will necessitate entering two times on the Score Sheet (Table B) for each flight: the recorded time, and the max time. Each contestant is required to have an understanding of what constitutes the max time and any other adjustments (motor or engine run time) corresponding to the flight flown. Table A summarizes the max times and engine/motor run times by class. Typically a contestant enters flyoff status following three consecutive maxes. Upon entering flyoff status, particular care must be taken to fly in accordance with each class's flyoff max time/engine run/motor run requirements.

**FAI Classes** Due to the fundamental differences in FAI contest management vs. AMA/NFFS/FAC contest structure, FAI classes must necessarily operate somewhat differently than their rules would otherwise mandate in order for those classes to be suitably incorporated into the Scramble structure. FAI classes will operate without a round structure, and without station assignments. For Major FAI classes (F1A, B, C, P, Q), seven rounds will be flown with 3-minute maxes, increasing by 2-minutes for each subsequent flight. For Mini FAI Classes (F1G, H, J, S) five rounds will be flown with 2-minute maxes, increasing by 1 minute for each subsequent flight. (See Table A). It should be further noted that when timing FAI models, rules dictate that flight times are rounded up or down to the nearest whole second, depending on the tenths of seconds. A time of 119.5 becomes 120, whereas a time of 119.4 rounds to 119, e.g..

**Multiple Classes and Re-Entry** Contestants may fly multiple classes during a Scramble, but only that contestant's best string of flights will be taken into consideration for the day's results. Re-entry into the contest to establish a clean slate in order to overcome a disappointing result is not permitted.

Contestants may fly multiple models of the same class, but all such flights contribute to a single (not multiple) string of flights for scoring purposes. A contestant may not create two distinct strings of P-30 flights, for instance, by switching to another model. However, this is not intended to prohibit the use of the same model for multiple classes where permitted, such as for E-36/A Electric/B Electric.

### 4. Winning and Ranking

**Calculating a contestant's score** The winner of the day's Scramble shall be the contestant with the greatest number of Calculated Maxes. In cases where the contestant 'maxes out', i.e., achieves three consecutive maxes beginning with the first (or achieves three maxes within their first six flights for AMA glider events), he or she continues flying until failing to achieve a max. The calculated number of maxes is the number of complete maxes, plus a fraction of a max for the final flight. That final fraction is calculated as flight time divided by the max time appropriate for that flight (See Table A).

#### Scoring Examples

P-30: 120, 120, 120, 140. Score =  $3 + (140/150) = 3.93$  Calculated Maxes, which reflects the fact that for P-30, the 4<sup>th</sup> flight requires a 150-second max.

F1G: 120, 120, 120, 180, 240, 200. Score =  $5 + (200/300) = 5.67$  Calculated Maxes.

Mulvihill flying to Cat II: 180, 240, 300, 360, 235 Score =  $4 + (235/420) = 4.56$

Calculated Maxes.

AMA Catapult Glider: 90, 90, 75, 82, 90, 90, 90, 61. Score =  $5 + (61/90) = 5.68$

Calculated Maxes, reflecting the fact that in AMA glider events, attaining three out of the first six flights warrants entering flyoff status.

### **III. The Season-Long Contest (The Annual Scramble)**

**1. Accumulating Scramble Points** Following each monthly Scramble, Scramble Points will be added to each contestant's running total. Scramble points are awarded on a 100-point basis, with the winner earning 100 points and others earning a percentage of 100, based on the number of Calculated Maxes from the month's Scramble, with the following important potential adjustment. In cases where the winner wins by more than two Calculated Maxes, the winner's margin will be capped at two maxes prior to awarding Scramble Points.

As described in Section I's "Fundamental Adjustments," the purpose of this rule is to constrain the season-long effect of perhaps a single remarkable day in which the winning flier so overwhelmingly dominates others that the season-long contest would be rendered virtually unwinnable by others, thereby reducing interest or participation.

**2. Best Five of Seven** A contestant's Season-Long total will reflect the five best results out of the seven possible Scrambles. This is to permit occasional non-participation without penalty.

**3. Minimum Number of Contestants** A Scramble will be considered to have occurred, and results considered official for the purpose of the Season-Long Contest, as long as at least three contestants logged official flights at the event.

**4. Accounting** The club will designate an individual whose role it is to maintain Scramble records and the Annual Scramble accounting. This will normally involve populating the Scramble Spreadsheet and providing updates periodically to the newsletter editor for mid-season publishing.

### **IV. Future adjustments and fine tuning**

The changes codified in this revision are significant enough that continued monitoring is warranted. It is suggested that the club maintain the Scramble Rules Committee, which will review results and experiences following each season and if need be, make recommendations regarding future revisions.

## Table A: Maxes and Engine Run times

**This table is a summary only.** The primary governing documents are each body's rulebook (AMA, NFFS, FAC, FAI), with limited exceptions being as noted above in Scramble Rules. For classes not mentioned here, refer to the appropriate rulebook for maxes and motor/engine run times.

### CAT II (Default)

#### Classes that begin with a 90-second Max

	Flights 1, 2 & 3	4 <sup>th</sup> Flight	5 <sup>th</sup> Flight	6 <sup>th</sup> Flight
<b>AMA CLG</b>	90	90	90	90
<b>E-20</b>	15 Sec 90	8 Sec 90	8 Sec 90	8 Sec 90
<b>EP-30</b>	20 Sec 90	10 Sec 120	10 Sec 120	10 Sec 120

#### Classes that begin with a 2-Minute Max

	Flights 1, 2 & 3	4 <sup>th</sup> Flight	5 <sup>th</sup> Flight	6 <sup>th</sup> Flight
<b>P-30</b>	120	150	180	210 (+ 30 thereafter)
<b>AMA HLG</b>	120	120	120	120
<b>E-36, A, B Electric</b>	10 Sec 120	5 Sec 120	5 Sec 120	5 Sec 120
<b>Embryo, Dime, Peanut, OT Stick, OT Fuselage</b>	120	120	120	120
<b>FIG, H, J</b>	120	120	120	180 (+ 60 thereafter)
<b>F1S</b>	7 Sec 120	5 Sec 120	5 Sec 120	5 Sec 180 (+ 60 thereafter)

#### Classes that begin with a 3-Minute Max

	Flights 1, 2 & 3	4 <sup>th</sup> Flight	5 <sup>th</sup> Flight	6 <sup>th</sup> Flight	7 <sup>th</sup> Flight
<b>Mulvihill, Moffett</b>	180, 240, 300	360	420	480 (+ 60 thereafter)	
<b>1/2A, A/B, C/D</b>	9 Sec 180	7 Sec 180	5 Sec 180	5 Sec 180	
<b>Classic Towline</b>	180	180	180	180	
<b>Andrade</b>	180	240	300	300	
<b>F1A, B, C, Q</b>	180	180	180	180	180 (+ 120 thereafter)
<b>F1P</b>	7 Sec 180	7 Sec 180	7 Sec 180	7 Sec 180	7 Sec 180 (+ 120 thereafter)

# CAT III (Windier Days)

## Classes that begin with a 90-second Max

	Flights 1, 2 & 3	4 <sup>th</sup> Flight	5 <sup>th</sup> Flight	6 <sup>th</sup> Flight
<b>AMA CLG</b>	90	90	90	90
<b>E-20</b>	15 Sec 90	8 Sec 90	8 Sec 90	8 Sec 90
<b>EP-30</b>	20 Sec 90	10 Sec 120	10 Sec 120	10 Sec 120

## Classes that begin with a 2-Minute Max

	Flights 1, 2 & 3	4 <sup>th</sup> Flight	5 <sup>th</sup> Flight	6 <sup>th</sup> Flight
<b>Mulvihill, Moffett</b>	120, 180, 240	300	360	420 (+ 60 thereafter)
<b>P-30</b>	120	150	180	210 (+ 30 thereafter)
<b>E-36, A, B Electric</b>	10 Sec 120	5 Sec 120	5 Sec 120	5 Sec 120
<b>1/2A, A/B, C/D</b>	7 Sec 120	5 Sec 120	5 Sec 120	4 Sec 150
<b>AMA HLG</b>	120	120	120	120
<b>Embryo, Dime, Peanut, OT Stick, OT Fuselage</b>	120	120	120	120
<b>Andrade</b>	120	180	240	240
<b>F1G, H, J</b>	120	180	240	300 (+ 60 thereafter)
<b>F1S</b>	7 Sec 120	5 Sec 120	5 Sec 180	5 Sec 240 (+ 60 thereafter)

## Classes that begin with a 3-Minute Max

	Flights 1, 2 & 3	4 <sup>th</sup> Flight	5 <sup>th</sup> Flight	6 <sup>th</sup> Flight	7 <sup>th</sup> Flight
<b>Classic Towline</b>	180	180	180	180	
<b>F1A, B, C, Q</b>	180	180	180	180	180 (+ 120 thereafter)
<b>F1P</b>	7 Sec 180	7 Sec 180	7 Sec 180	7 Sec 180	7 Sec 180 (+ 120 thereafter)



