

2020 Aerial Scramble Event Information & Rule Modifications

Following are highlights, clarifications and modifications from 2020 trial event rules: [Aerial Scramble](#) for 2020 MSO Tournament on 4/25/2020.

1. Teams are asked to check in at the beginning of their scheduled event hour.
2. Team will be given Two (2) unopened Guillow's Balsa Wood Flying Machine Kit* for build and competition. Students can assemble one or two planes using some or all the parts from both kits**.
3. Plane mass should be at least 12.0 g, including propeller but excluding the rubber motor. Landing gear is optional per team's choice.
4. Adhesives are allowed to be used during assembly.
5. Team must present a flight log of recorded data from their test flights at check in. Data must include at least 4 required parameters (1. Estimated peak flight height after launch; 2. Rubber motor size or length, 3. Flight time, 4. Number of rubber motor rotation or winds) for 10 or more test flights prior to the competition day. Team may choose additional data beyond those required. Incomplete flight log will receive 10% deduction from their final score; and 30% deduction without flight log.
6. Teams without First-Aid kit contain 3 adhesive Band-Aids will have 10% deduction of their final score;
7. Teams without cutting board / wax paper in their tool kit will receive 20% deduction of their final score;
8. Teams have construction violation will be ranked as Tier 2 (or 100 points) deduction.
9. Teams are allowed to bring up to 4 of their own rubber motors or use the rubber loops from the kit. Each rubber motor cannot exceed 2 grams.
10. Practice kits* before the invitational can be purchased at:

Amazon: <https://www.amazon.com/Guillows-Balsa-Wood-Flying-Machine/dp/B000GL1CT6>

Hobby Lobby: <https://www.hobbylobby.com/Crafts-Hobbies/Hobbies-Collecting/Gliders-Planes/Flying-Machine-Model-Airplane-Kit/p/80798010>

11. Event site room size will be announced 2 weeks before the tournament.

*Note: The Guillows Flying Machine kit may be in short supply. These will be used at the State Tournament, however for regionals and invitationals (and practice) it is acceptable to use any other similar kit (eg. the [Guillow's SkyStreak](#) or [AMA Alpha](#)). It is strongly preferred that every team at a tournament uses the same kit (whichever model is chosen by the tournament organizers) for competition.

Note 2: The main goal is to have at least one complete kit per team – the build quality is variable for these inexpensive kits and some parts may arrive broken even in unopened boxes. Tournament organizers may find it beneficial to keep extra, **unused parts in reserve to supply replacements for broken pieces.