



2020 US Space Modeling Team Bulletin #1 – September 2018 Team Selection

The 23rd Federation Aeronautique Internationale (FAI) World Championships for Space Models will be held in August, 2020 in Romania. The exact date and location will be announced by the FAI by April, 2019.

The National Association of Rocketry (NAR) is responsible for organizing the U.S. Senior and Junior Teams that will compete in the 2020 World Championships. This bulletin outlines the procedures that will be used to competitively select these teams.

Basic Ground Rules

- A competitive flyoff for team selection will be held July 28-30, 2019 in conjunction with the 2019 North Coast Cup FAI contest and the NAR Annual Meet (NARAM-61) in Muncie, Indiana.
- The NAR FAI Activities Committee for this contest cycle is John Langford, Trip Barber, Chris Flanigan, Mike Nowak, and Matt Steele. This group will serve as the contest jury and oversee the selection process.
- The team selection flyoff will be flown under the 2019 edition of the FAI Sporting Code. The FAI code may be found at <https://www.fai.org/page/ciam-code> . The 2019 edition will be released in late December 2018. In cases where FAI and NAR rules conflict, the NAR Model Rocket Safety Code shall have highest precedence, followed by the FAI Sporting Code, except as modified herein or in subsequent bulletins.
 - Extensive details, advice, and designs for the FAI events can be found on the NAR website at <http://www.nar.org/contest-flying/fai-spacemodeling/>
- Contest director for the flyoffs will be Matt Steele (MattMSteele@gmail.com).
- Anyone participating in the flyoffs must also register as either a contestant or a sport flyer at NARAM-61 and must be a current member of the NAR.
 - Competitors who will not have reached the age of 19 by December 31, 2020 will compete for the Junior Team. All others will compete for the Senior Team
- Flyoffs for the S2P, S3A, S4A, S6A, S8E/P, and S9A events will be conducted in conjunction with the flying of these same events in the North Coast Cup, an FAI sanctioned World Cup and Open International contest. Flyoff participants have the option to also compete in that contest, if they have a current FAI license.

- The US team for each event will be named as follows: All qualifiers in each event will be ranked based on flyoff performance. Team slots will be offered to qualifiers in order of rank, until a three-member team has been named or until all flyers with a score equal to 50% or better of the top score have been offered a slot. Further assignments will be at the discretion of the NAR FAI Activities Committee. Flyers with scores below 50% of the top score are not guaranteed an assignment.
- Pending availability of qualified applicants, no person will be named to the team for more than two events (not counting S2/P). Those who are ranked in the top three of more than two events based on flyoff scores must pick which two events they will compete in once the final flyoff standings are announced.
- Junior and Senior teams will be selected for S2/P, with the understanding that this event is not guaranteed to be flown at the World Championships and, if flown, it will be an “Open International” (lower rank) of competition with cash prizes and not FAI medals. For the last four World Championships, the US has sponsored and run this event, courtesy of the approval of the host organizers. We intend to offer to do so again in 2020, but host approval is not guaranteed.
- Registration for the flyoffs will be handled through the NARAM-61 website (www.naram.org) once it opens. There will be no fee for participation in the flyoffs, but there will be an entry fee for those who wish to compete in the North Coast Cup in connection with the flyoffs.
- As a condition of application to become part of the US Team, all applicants agree to be responsible for the following costs and obligations if selected:
 - Maintaining membership in the NAR through September 2020.
 - Holding an FAI license issued through the National Aeronautic Association and holding a membership in the Academy of Model Aeronautics, both by no later than March 2020, and both of which must be valid through September 2020.
 - Placing a non-refundable deposit of within 30 days of selection and the balance of the non-refundable team fees, as shown below:

Category	Deposit (August 2019)	Balance (February 2020)	Total (w/o travel)
Seniors	\$300	\$1,200	\$1,500
Juniors	\$300	-0-	\$300
Supporters	-0-	\$800	\$800

These fees cover contest entry fees, room and board at the contest, contest motors, local transportation during the contest, team shirts and team caps. Team jackets are included for competitors and are \$100 extra for supporters. Travel to and from the contest site is not included and is the responsibility of the team member.

- Regularly practice by building and flying models for their event(s) in the interim between selection and the championship. Team members may be asked to provide their team manager regular assessments of their progress.

- Attending either a US World Cup or a separate US Team practice session (if one is held) after team selection and prior to the WSMC.
- The costs above include a subsidy for Junior members provided by the NAR and corporate sponsors. For the past two cycles, we have provided an additional \$1,000 travel subsidy to Junior competitors, paid after the competition. This amount is not guaranteed; it may be less if the Junior team is larger than ten members.
 - In return for this subsidy, Juniors agree to contribute a short first-person account of their experience for publication in Sport Rocketry. These are due within one month of the end of the World Championships.

Events

Events for the flyoffs are those currently announced for the World Championships. Those marked with an asterisk will also be part of the North Coast Cup:

1. S1B (Altitude Models - 2.51-5.00 NS) – Juniors and Senior (*see “Special Provisions”*)
2. S3A* (Parachute Duration Models - 0 to 2.5 NS) - Senior and Junior
3. S4A* (Boost Glider Duration Models 0 to 2.5 NS) - Senior and Junior
4. S5B (Scale Altitude Model 2.51-5.0 NS) – Junior
5. S5C (Scale Altitude Model 5.01 to 10.0 NS) - Senior
6. S6A* (Streamer Duration Models - 0 to 2.5 NS) - Senior and Junior
7. S7 (Scale) - Senior and Junior
8. S8D (Rocket Glider Duration - 10.01 to 20.00 NS) - Junior
9. S8E/P* (Rocket Glider Duration and Precision Landing Models) - Senior
10. S9A* (Gyrocopter Duration Models - 0 to 2.5 NS) - Senior and Junior
11. S2/P* (Precision Fragile Payload) – Senior and Junior

Motors

Only motors with a current contest or safety approval from the NAR may be used in the flyoffs. Only motors 30 grams or less of propellant may be used since motors with more than 30 grams of propellant cannot be shipped internationally and will not be available at the WSMC. Those competing in the North Coast Cup may not use reloadable motors as these are not permitted under FAI rules.

Special Provisions

- All models shall be inspected for conformance with FAI rules prior to the start of the round. Check-in on the evening before flight is strongly preferred.
- A third model may be used in the third round in S1, S3A, S4A, S6A and S9A. Any flight using the third model will not be an official flight in the North Coast Cup competition but will count towards team selection.

- Altitude events (S1, S2/P, and S5) must use an Adrel ALT-BMP altimeter. You may provide your own, or there will be altimeters available for free rental with a \$60 deposit refundable on return.
- For Scale (S7), models will be judged for craftsmanship, but a boilerplate may be flown. S5 Scale Altitude must fly the model that is judged – no substitutions.
- Consistent with new FAI rules that will go into effect in 2019, piston launchers may not be used in S1, S2P, or S5, and “floating head” piston launchers may not be used in any event.
- Depending on the availability of timers, we may elect to fly duration events with one timer per model.
- While S1A (Juniors) and S1B (Seniors) will be flown as separate power classes at the World Championships, due to limitations on the types of appropriate motors available in the US, all S1 flyoff entries for both Juniors and Seniors will be required to use A10-0T motors in the lower stage and 1/2A3-4T motors in the upper stage.

Tentative Schedule

Saturday, July 27. Check in S5 and S7 models for judging starting 8 PM

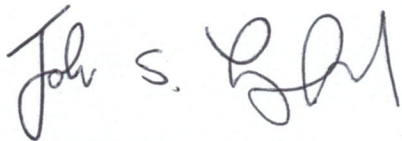
Sunday, July 28. Fly S2P (morning), then fly S8D and S8E/P (afternoon).

Monday, July 29. Fly 2 rounds each of S3A, S4A, S6A, and S9A.

Tuesday, July 30. Fly 3rd round of S3A, S4A, S6A, and S9A and both rounds of S7 (morning), then fly all 3 rounds of S1 and S5 (afternoon)

For More Information

Please contact myself or Trip Barber at ahbarber@alum.mit.edu for questions on team selection; and Matt Steele at MattMSteele@gmail.com for questions on flyoff management or the North Coast Cup.



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