



## 2025 US Space Modeling Team Bulletin #1 September 2023 Team Selection

The 24<sup>th</sup> Federation Aeronautique Internationale (FAI) World Championships for Space Models will be held August 21-28, 2025 in Zrenjanin, Serbia. The National Association of Rocketry (NAR) is responsible for organizing the U.S. Senior and Junior Teams that will compete in the 2025 World Championships. This bulletin outlines the procedures that will be used to competitively select those teams.

The NAR FAI Activities Committee for this contest cycle is John Langford, Trip Barber, Chris Flanigan, Mike Nowak, Steve Kristal, and Matt Steele. This group will serve as the contest jury and oversee the selection process.

### Basic Ground Rules

- A competitive flyoff for US Team selection will be held August 3-5, 2024 in conjunction with the 2024 North Coast Cup FAI contest and the NAR Annual Meet (NARAM-65) in Pueblo, Colorado.
- The team selection flyoff will be flown under the 2024 edition of the FAI Sporting Code. The FAI code may be found at <https://www.fai.org/page/ciam-code>. The 2024 edition will be released in late December 2023. 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](mailto:MattMSteele@gmail.com)).
- Anyone participating in the flyoffs must also register as either a contestant or a sport flyer at NARAM-65 and must be a current member of the NAR.
  - Competitors who will have reached the age of 19 by December 31, 2025 will compete for the Senior Team. Those younger will compete for the Junior Team.
- Flyoffs for the S3A, S4A, S6A, S8D/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.
- Competitors in either age division who wish to participate in the flyoffs in S3A, S4A, S6A, and S9A must earn eligibility for participation by demonstrating their proficiency in

flying through conducting and reporting the results of flights in these events at an NAR launch between January 1, 2024 and June 30, 2024. The procedures for conducting and reporting these flights will be identical to the NAR NRC process, and a separate national “scoreboard” of flight results for these events will be maintained on the NAR website and available by January 1. NAR membership is required to participate in this process.

- Competitors may conduct and report flights as often as they wish in attempts to better their posted score.
- Flights will be conducted in accordance with FAI rules, with the following exceptions for S3A, S4A, S6A, and S9A: three models are permitted; all flights will be flown with 1/2A motors (A motors for S4A); and no additional flights are required in the event of three “maxes”.
- A minimum of the top 10 competitors in each event, in each of the two age divisions, based on scores conducted by June 30, 2024 and posted by July 5, will be eligible to enter the final in-person team selection flyoff for that event.
- The US team for each event in each age division will be named as follows.
  - No one will be named to the team who has not flown in the flyoffs.
  - All qualifiers in each event will be ranked based on flyoff performance. Those who are ranked in the top three of an event will be named to that event team.
  - Those who are ranked in the top three in multiple events based on flyoff scores must pick one of those events as their guaranteed event once the final flyoff standings are announced.
  - Further event assignments will be at the discretion of the NAR FAI Activities Committee, informed by flyoff rankings but also with consideration of maximizing opportunity among younger flyoff participants who fly competently to be part of the US team and of ensuring that as many as possible of the event teams have at least one female member to take advantage of the FAI rule permitting a fourth team member in that case.
  - Pending availability of qualified applicants, no person will be named to the team for more than two events.
  - Those who were named "world champions" in an event in 2023 may fly that event solo to defend their title regardless of the team selection process and the two-event limit, but if they want to be part of the US team in that event they must win that spot through the flyoff competition.
- Registration for the flyoffs will be handled through the NARAM-65 website ([www.naram.org](http://www.naram.org)) once it opens. There will be a \$20 fee for participation in the flyoffs to cover the cost of the rocket motors provided to participants. There will be a separate 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 August 2025.

- 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 February 2025, and both of which must be valid through August 2025.
- 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<br>(August 2024) | Balance<br>(February 2025) | Total<br>(w/o travel) |
|------------|--------------------------|----------------------------|-----------------------|
| Seniors    | \$300                    | \$TBD                      | \$TBD                 |
| Juniors    | \$300                    | -0-                        | \$300                 |
| Supporters | -0-                      | \$TBD                      | \$TBD                 |

These fees will cover contest entry fees and room and board at the contest, once these have been established. The costs for entry fees and room and board for Junior team members that are above \$300 will be covered by a subsidy provided by the NAR. Team uniforms are funded by a grant from Estes Industries for competitors and managers, and will be available for purchase by 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 will 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.

## Events

Events for the flyoffs are those currently announced for the World Championships. These Championships do not currently include the S2P event. If it is added at a later date, a process for selecting that event team will be announced. The events listed below that are marked with an asterisk will also be part of the North Coast Cup. The parachute (S3), streamer (S6), and gyrocopter (S9) events in the 0 - 2.5 N-sec power class will be flown with 1/2A motors while the S4 glider event will be flown with A motors:

1. S1B (Altitude Models - 2.51 to 5.0 N-sec) – Senior and Junior
2. S3A\* (Parachute Duration Models - 0 to 2.5 N-sec) - Senior and Junior
3. S4A\* (Boost Glider Duration Models 0 to 2.5 N-sec) - Senior and Junior
4. S5B (Scale Altitude Model 2.51 to 5.0 N-sec) – Junior
5. S5C (Scale Altitude Model 5.01 to 10.0 N-sec) - Senior
6. S6A\* (Streamer Duration Models - 0 to 2.5 N-sec) - Senior and Junior
7. S7 (Scale) - Senior and Junior

8. S8D (Rocket Glider Duration - 10.01 to 20.00 N-sec) - Junior
9. S8D/P\* (Rocket Glider Duration and Precision Landing Models – 10.01 to 20.00 N-sec) - Senior
10. S9A\* (Gyrocopter Duration Models - 0 to 2.5 N-sec) - Senior and Junior

## **Motors**

Only motors with a current contest approval from the NAR may be used in the flyoffs.

### **Motor Selection.**

**Only** the following motors will be allowed for the 2024 North Coast Cup/US Team Flyoffs:

**S1B:** Estes A10-0T, Estes 1/2A3-4T (supplied by meet organizer)

**S3A:** Estes 1/2A3-2T, Estes 1/2A3-4T (supplied by meet organizer)

**S4A:** Estes A3-2T, Estes A3-4T (supplied by meet organizer)

**S5B:** Estes B6-6 (supplied by meet organizer)

**S5C:** Estes B6-0, B6-4, B6-6, C5-3, C6-3, C6-5, C6-7; Aerotech C12-4, C12-6, C12-8 (supplied by competitor)

**S6A:** Estes 1/2A3-2T, Estes 1/2A3-4T (supplied by meet organizer)

**S7:** For Seniors any Estes or Aerotech NAR contest certified non-reloadable motor with 80 or less n-sec total impulse and 30 grams or less propellant weight (supplied by competitor). For Juniors, an Estes D12-3 (supplied by meet organizer)

**S8D:** Aerotech reloadable D2.3-P (reload kits supplied by meet organizer)

**S8D/P:** Aerotech reloadable D2.3-P (reload kits supplied by meet organizer)

**S9A:** Estes 1/2A3-2T, Estes 1/2A3-4T (supplied by meet organizer)

### **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 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 (S1B 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 deposit refundable on return.
- For Senior 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.
- Junior Scale Altitude (S5) and Scale (S7) will be flown under special provisions that will be unique to the flyoff. All Juniors must build and fly the same models, an Estes Black Brant III (kit #1293) for S5B and an Estes Saturn 1B (kit #7251) for S7. Competitors are to build the kit as per the Estes instructions. Coloration of the model should be what is on the Estes face card and instructions. Models will be built with launch lugs and will be flown off a launch rod. Models will be judged and awarded points for their build quality and if they fly and recover successfully. No data pack is required. No measurements will be done. Total score will be a combination of the static and flight scores.
- Consistent with FAI rules, piston launchers may not be used in S1B or S5, and “floating head” piston launchers where the following FAI rule requirements are not met may not be used in any event.
  - No part of the launcher shall lose contact with the launcher assembly.
- Depending on the availability of timers, we may elect to fly duration events with one timer per model.

### **For More Information**

Please contact John Langford at [jslangford@me.com](mailto:jslangford@me.com) or Trip Barber at [ahbarber@cox.net](mailto:ahbarber@cox.net) for questions on team selection; Steve Kristal at [stevekristal@wowway.com](mailto:stevekristal@wowway.com) for questions on Junior team mentoring or on Junior S5 or S7 and Robin Houston at [houstonr742@gmail.com](mailto:houstonr742@gmail.com) for general questions about the Junior team; and Matt Steele at [MattMSteele@gmail.com](mailto:MattMSteele@gmail.com) for questions on flyoff management or the North Coast Cup.