## **UAS4STEM Competition Info**

This email is really LONG because it contains all the details you want about the UAS4STEM competition timing, location, and costs. It also has information about an urgent need to consider buying plane tickets sooner rather than later. Specific requests to you are at the end of this email and a preliminary draft itinerary is attached. Please reply by Monday (2/20).

There are two levels of competition for UAS4STEM: **Preliminaries** and **Finals**. Both include a presentation and a flying component. (There is also a creative video required, and students need to complete ground school.) Teams who do well at the Preliminaries are **invited** to participate in Finals. (Note: this year, some non-U.S. teams are expected for the first time.)

Preliminaries will be held in **April** via **virtual** meeting (using Microsoft Teams). The flying component during Preliminaries consists of a proof-of-flight video, and a mission planner simulation activity. The UAS4STEM officials will provide a sign-up list for our team to select a date/time to compete. **We found out just tonight that the sign-ups are expected to open tomorrow morning, and that Preliminaries will be held 4/10-4/21. (We need to decide what day/time to sign up for ASAP!)** 

**Historical note**: prior to 2020, the first level was called "Regionals" and competitions were held in each of several regions across the U.S. The second level was called "Nationals" and competitions were held at the <u>Academy of Model Aeronautics</u> (AMA) headquarters in Muncie, Indiana. There were no competitions in 2020 (due to COVID), and in 2021, in-person Regionals were replaced by virtual Preliminaries, and the Nationals location was changed. (Also, the competition was opened up to international teams, causing the second level to be renamed "Finals".) So **we've only experienced the current competition structure and timeline twice** (in 2021 and 2022).

UAS4STEM is still hosted by the AMA, but Finals are now held during <u>AirVenture</u> at Wittman Regional Airport in Oshkosh, Wisconsin. The 2023 competition will be the week of 7/24. AirVenture is an enormous week-long fly-in convention hosted by the <u>Experimental Aircraft Association</u>. AirVenture includes more than 10,000 aircraft on display, daily air shows, and more than 800 exhibitors. It is visited by more than 500,000 people from 80 countries.

Costs: The Explorer Post/Rockville Science Center is paying for the supplies we need for the competition and team members will need to pay their own travel costs which include lodging, meals, and transportation. AirVenture tickets are provided at no cost to UAS4STEM teams (including chaperones). Note: free campsites are also available for UAS4STEM teams, but Tom and Beth are not good campers so we do not

take this option. Also, in 2021, there was a really big storm and we were especially happy we weren't camping!)

**Lodging**: Our team rented a large AirBnB house in 2021 and 2022. We booked in May and lucked out both times (the house was made available at the last minute in 2021, and had a booking that got canceled in 2022). Apparently, lodging options diminish dramatically prior to January - especially for large groups!

We looked for lodging four weeks ago and found very few options for this year's team of 10 people. As of 1/13, available options included one VRBO house in New London (almost an hour away from AirVenture) and one hotel in the same town. The hotel, AmericInn by Wyndham is \$1,625/night (for 6 double rooms). The house is \$803.25/night and should be able to accommodate the whole team and 3 chaperones (Tom, Beth, and a team parent). We reserved both. We prefer the house because it is much less expensive, more comfortable, and better for meals.

**Meals:** While renting the AirBnB in 2021 and 2022, we ate breakfast at the house, packed lunches (sandwiches, fruit, veggies, and some chips), and had home-cooked food or take-out food for dinner at the house on most evenings. Compared to eating at restaurants and AirVenture food stands, these meals were healthier, less expensive, and easier - especially for our group where some students have dietary restrictions. Based on actual travel costs in 2021 and 2022, **we expect the food cost to be less than \$25/day per person**, provided that we stay at a rental house.

**Transportation**: In 2021, we analyzed the trade-offs between driving and flying (with a rental car for local travel in Oshkosh) and decided that flying is preferred. In 2021 and 2022, we booked our flights in May with roundtrip fares of \$230 and \$335 respectively for travel between BWI and Milwaukee (the nearest commercial airport to AirVenture). **We looked at airfares four weeks ago and found that some of the lowest-fare options on Southwest (our preferred carrier) were already selling out!** 

Tonight, I selected two Southwest flights that may have enough capacity for our team and are \$335 (including taxes and fees) - details are at the bottom of the attached draft itinerary. Since our group is so big, we may have difficulty purchasing tickets for all of us to fly on the same flight if we wait too long to make the purchase. Therefore, we propose that we purchase tickets soon, with the potential risk of not qualifying for Finals and having to cancel those flights.

Note: Every airline has a different policy for unaccompanied children. Southwest now considers children who are 12-17 years old "Young Travelers" and not "Unaccompanied Minors". You can find their Young Traveler policy here.

**Total Cost:** Since the competition will start on Monday 7/24, we anticipate traveling to Oshkosh on Sunday 7/23 and returning on Friday 7/28. **Our PRELIMINARY estimate of the total cost, including airfare, two rental cars, rental house, and food is: approximately \$1,300 per person for the whole trip.** (If we win a cash prize, then most of that cash will be used to offset a small percentage of the cost for each person.)

## Our request to you:

- Help your student (as needed) to determine which days between 4/10 and 4/21 they will be available to participate in Preliminaries (at Rockville Science Center).
   The competition will take approximately 1 hour, and we usually prep 1 hour before the competition start time, and eat ice cream afterward, so we probably need a 3-hour block of time.
- 2. Confirm that your student does plan to participate in Finals, provided that our team qualifies. (A formal permission slip will be provided later for you to sign.) If so, then also answer the remaining questions...
- 3. Let us know if you're interested in being a chaperone.
- 4. Let us know if you have any concerns about the travel plan and costs.
- 5. Let us know if you are willing to purchase airfare "now" instead of waiting until the end of April (when we find out if we'll be invited to Finals). If everyone is willing to do this, then Beth will coordinate the ticket purchases next week.
- 6. Let us know if you have fundraising ideas, and/or if you can help with fundraising. (We used a GoFundMe last year, but started it very late and raised only \$1,570.)

Thank you for supporting your student and us in this very educational and exciting endeavor!

Regards, Beth and Tom