

Wisconsin Space Grant Consortium
2020 Summer Advisory Council Meeting
Student Satellite Initiative Report – William Farrow, MSOE
Wednesday, Aug 12, 2020

1. Elijah High Altitude Balloon Project

- New: As a result of Covid 19, this summer's project was entirely online. It was also realigned to develop a payload that would be useful to fly during the upcoming total solar eclipse in April 4, 2024.
- What: Engineering and Science students that would like hands-on experience, form a team responsible for the design, build, test and flight of a science payload to be flown on the WSGC Elijah High Altitude Balloon. In addition they are responsible for launch, support, tracking and recovery of the WSGC's Elijah High Altitude Balloon System. No advanced knowledge or experience with high altitude balloons are necessary.
<https://spacegrant.carthage.edu/funding-programs/undergraduate/balloon-research/payload/>
- Who: Adjusted to seven (7) students from the normal six (6) since there would be no housing this summer.
- Obligation: Full-time, 10 week summer internship. The team will presents its results at the WSGC's Wisconsin Space Conference.

2. WSGC High Powered Rocketry

- What: Student teams are required to design, construct and fly a high-power rocket and payload system.
<https://spacegrant.carthage.edu/funding-programs/undergraduate/rocket-competitions/collegiate/>
- Who: 11 teams comprised of students from WSGC affiliates are currently in the competition.
55 students active in the competition across the 11 affiliate campuses.

WSGC 2019 Collegiate Rocket Launch Competition

- As a result of Covid 19, the 2019 competition was cancelled.
- There were 4 teams interested in attempting to complete the competition despite the cancellation; if they choose to fly their rocket and report their results to the WSGC, the competition will pay for their launch fee, rocket motor and travel as if the team was attending the competition launch

WSGC 2020 Collegiate Rocket Launch Competition

- Important alterations to the 2020 competition
 - Alignment of competition requirements with NASA's 2020 Technology Taxonomy <https://www.nasa.gov/offices/oct/taxonomy/index.html>
 - Converting most meetings to virtual in order to be more compatible with the "new normal".
 - Developing Level One Certificate training for competition teams. Planning to supply a kit, engine, registration, and launch fee to train the team lead (or designee if the team lead already has certification) towards Level One Certification. <http://www.tripoli.org/Level1>