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Apr 22nd, 10:00 AM - 12:00 PM

Nationwide Eclipse Ballooning Project

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Nationwide Eclipse Ballooning Project

Missouri University of Science and Technology

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Goals

- Introduction to basics of spacecraft through hands-on research and design.
- Improve Teamwork
- Collaborate with other teams across the nation
- To participate in K-12 STEM outreach efforts
- Build, design, and test payload packages



Our Approach

- On the engineering track:
- With the objective of building, testing, and flying a payload to livestream video during the eclipses.



Project Objective

The Missouri S&T High Altitude Ballooning Team is:

- Participating in the Nationwide Eclipse Ballooning Project
- (NEBP): a program in which 55 teams across the US are collaborating to launch high altitude balloons during the 2023 and 2024 solar eclipses.

At this Point

- Completed eleven weeks of training in AE 2790.
- Constructed Spring payloads and completed structures testing.



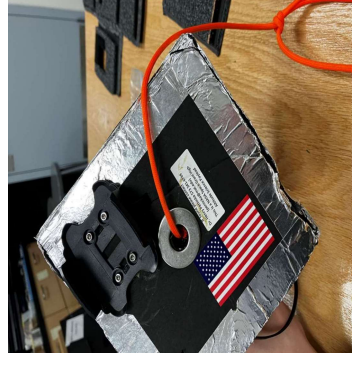
Upcoming Plans

- Complete the final training modules
- Assembling and testing the eclipse payload equipment
- Building the ground station, flight computer, and video streaming payloads.
- Throughout the remainder of the project, NEBP participants will be developing and hosting a variety of outreach events.



Acknowledgments

- The Missouri S&T NEBP team would like to acknowledge funding support from NASA-Missouri Space Grant Consortium Grant Award number 80NSSC20M0100 and equipment and training support from the NEBP leadership team.



Department of Mechanical and Aerospace Engineering