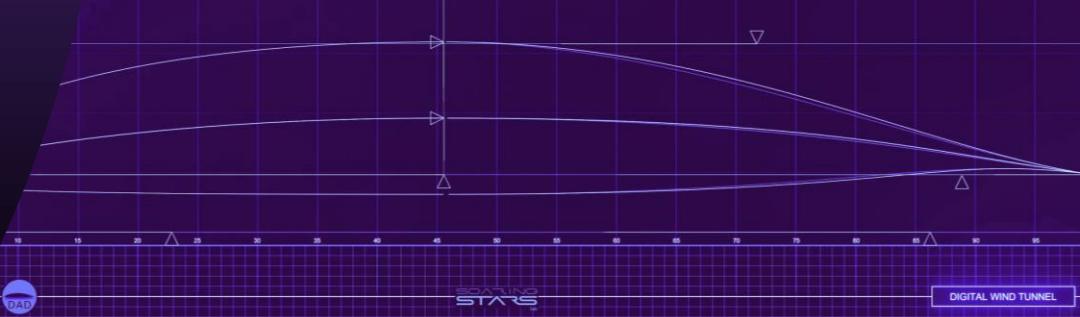
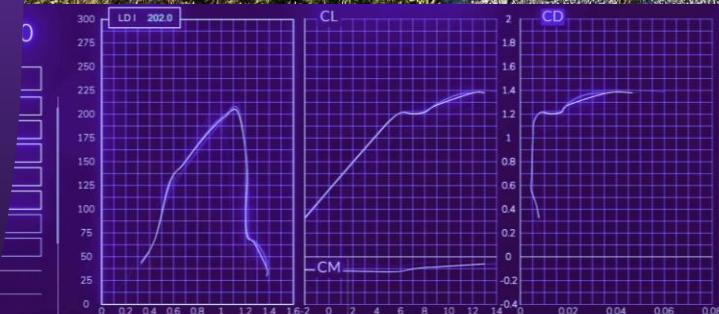




Western Aero Design Sponsorship Package 2023-2024





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Aero Design is a completely student-run mega project. Each year we design and build a radio-controlled aircraft for the SAE Aero Design competition. This aircraft must be capable of dropping autonomous aircraft on targets.





The SAE (Society of Automotive Engineers) Aero Design competition is held in the US every year at alternating locations. Teams from across the world come to compete in the competition consisting of three categories of aircraft that generally focus on carrying the most payload and completing a circuit. In recent years we have competed in the advanced class, requiring the deployment of autonomous gliders as well as payload over a target.



Our team consists of undergraduate engineering students across all disciplines. Students choose to focus on controls systems or the mechanical design of the plane. Through time-intensive dedication to our team, our members look to improve and apply their skills, broadening their abilities and knowledge in the aero design field. Team members are often passionate about the field of aerospace engineering, and this allows us to work towards designing and building a competitive plane we can be proud of.

Most of our members complete an internship or a year at Ivey and include multiple recipients of prestigious scholarships such as the Schulich Scholarship. The team allows students to connect across disciplines and years, working towards a common goal.



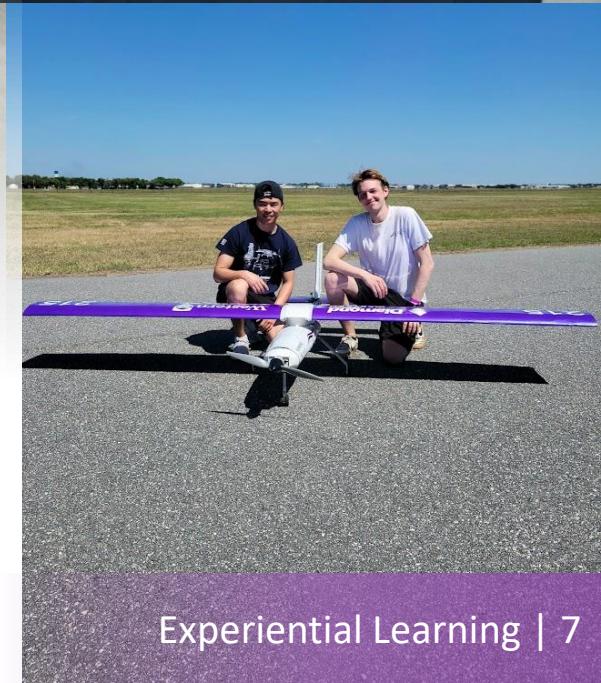


Sponsors allow students the opportunity to experience the entire practical design process from start to end with leeway for creative innovation and growth. They allow students the opportunity to gain hands-on experience through providing insight and materials ultimately helping prepare the next generation of engineers for the industry.





While a university education allows for the acquisition of engineering theory, mega projects allow for the application of theory to the real world. Students must show and defend their project to industry professionals, broaden their learning to topics outside their discipline, participate in both design and fabrication, and work on their project management, leadership, teamwork, and presentation skills.

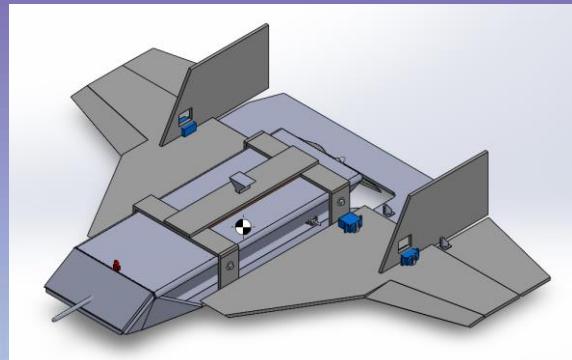
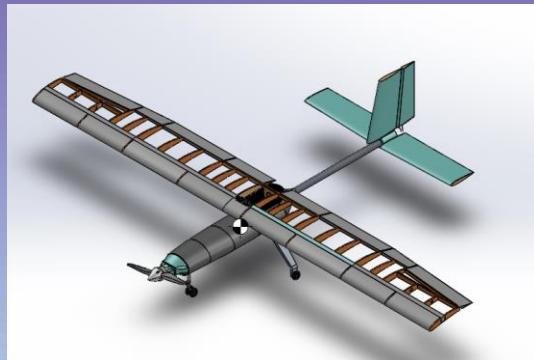




The club was created in 2001 and has been active in competition every year. The past few years the team has placed consistently in the top three in their design report, with notable overall results in 2014 (2nd place advanced class, 3rd place micro class) and 2017 (4th place advanced class). In 2019, the competition made a shift to electric motors as well as adding the autonomous glider component. Throughout the adaptation process, the team has remained steady with 6th and 9th place finishes in 2019 and 2023, respectively.



Meet Aeolus and Eurus



Cruise Velocity – **15 m/s**



Airfoil – **DAE-31**



Single Motor – **41.6 N of Thrust**



Payload Capacity – **2.3 kg**



Wingspan – **2.90 m**



Parasol Wing Configuration



Project Cost – **\$19,400**

49

Number of Students



	Bronze (\$0-\$1000)	Silver (\$1000-\$2000)	Gold (\$2000+)
Logo on website			
Year-end package			
Social media post			
Logo on shirt		Small	Large
Logo on plane		Small	Large
Commemorative plane model			
Invitation to demo days			

Not only does sponsoring us benefit you with local and international exposure, but it allows you to network with the next generation of engineers and connect with other businesses through aero.

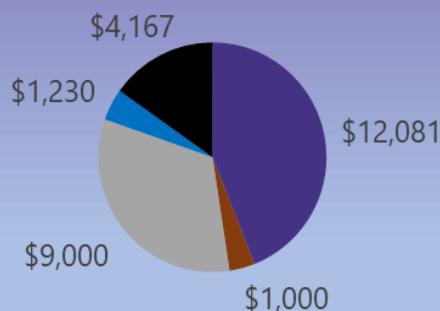
We strive to create lasting relationships with our sponsors.

As such, we make sure to go the extra mile for our long-term sponsors.

2023 Season Financials

With an expanded 2023 season budget, WAD adopted higher quality materials and manufacturing processes to achieve greater mission performance

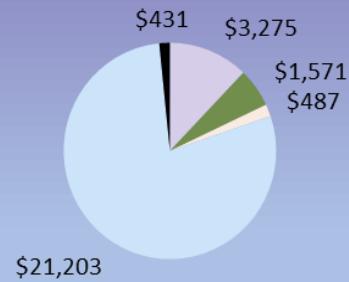
WAD's Revenues



- University Engineering Society Contribution
- Western Engineering Faculty Donation
- Corporate Sponsorships
- 2021-2022 Savings
- Team Member Fees

Total Revenues of \$27,500

WAD's Expenses

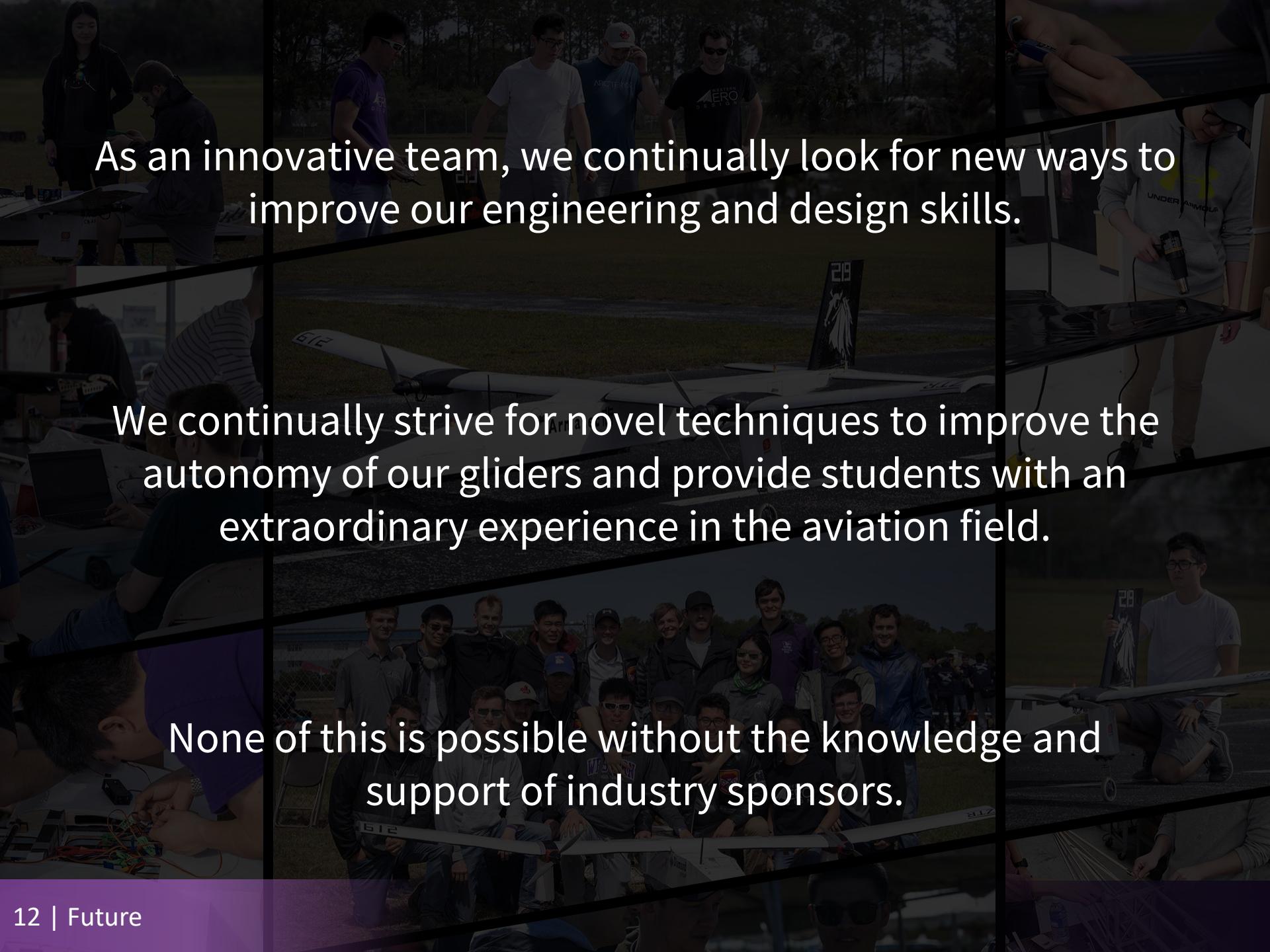


- Mechanical Projects
- Controls Projects
- Business Operations Initiatives
- Competition Operations
- Miscellaneous Spend

Total Costs of \$26,967

Takeaways

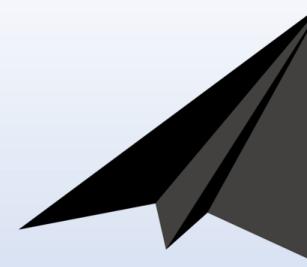
- **Strong Revenue Growth from New Sub-**
- Team:** 25% growth from 2021-2022
- **Significant Production Budget Growth**
- Maximizing Performance:** 25% growth from 2021-2022
- **Profitability Providing Optionality:**
 - *Tooling Investment:* Hot Wire Cutting Printer
 - *2023-2024 Multiple Unit Output:* Risk reduction at competition for critical parts
 - *2023-2024 Multi-Class Expansion:* Potential entry into Micro or Regular Class



As an innovative team, we continually look for new ways to improve our engineering and design skills.

We continually strive for novel techniques to improve the autonomy of our gliders and provide students with an extraordinary experience in the aviation field.

None of this is possible without the knowledge and support of industry sponsors.



Thank You

for taking the time to learn about our team.
We look forward to working with you in the future.

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 @westernuaero

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