



MAST Newsletter

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Message from the

TEAM MANAGER

The McMaster Aerospace Team is back again for the 2025-2026 season, and we couldn't be more excited! Challenged with a completely new competition ruleset, our team has stepped up to this daunting task, using our knowledge and experience from the past three years to develop a truly remarkable plane. Although the design looks quite different from previous years, we are determined to return to the 2026 SAE Aero Design East Competition with the best plane possible.

Joined by the new Co-Captains, Leon Chen and Kelsey Rough, the three of us have been working our hardest to continue improving our amazing team. We are so proud of the hard work, dedication, and innovation that our team exemplified throughout the fall semester; this newsletter is only a snapshot of the countless hours spent developing this year's design! It is an incredible privilege to be able to help lead this team and contribute to the aerospace community here at McMaster; we cannot wait share our achievements with you.

From welcoming new members to the team, conducting test flights, to taking part in school outreach events; our team has stayed busy this past fall semester! MAST had the privilege to work with the McMaster Women in Engineering Society to host a Glider Building Workshop. It is so fulfilling to share our hard work and deepen our connection to the McMaster community.

We are so proud of what our team achieved last year, and this has fueled our determination to continue developing and integrating new design ideas and techniques. Throughout this past fall semester, the team has worked diligently to design and model the Mac Flier Mk IV. The winter term will be full of manufacturing the plane and preparing for competition in March. We hope that you are just as excited as we are to get started!

I would also like to take this opportunity to thank our sponsors for the 2025-2026 season, who make this entire endeavor possible. We truly value and appreciate all your contributions to the team – the mentorship, professional career advice, excitement towards our achievements, and much more. To our returning sponsors, thank you for your continued support and for believing in us, year after year! To our new sponsors, welcome to the team! We can't wait to share with you all that we achieve this season.

Onwards and Upwards,



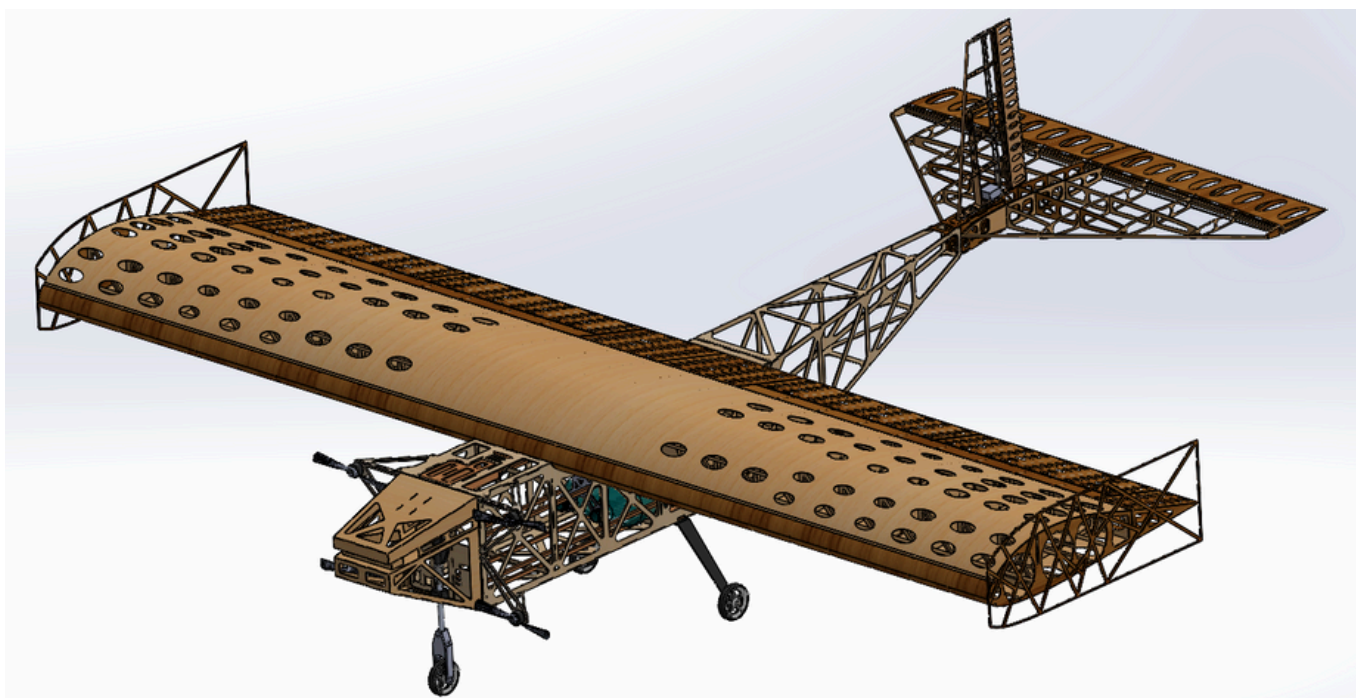
*Competition Requirements...***THE MAC FLYER MK IV****COMPETITION REQUIREMENTS**

MAST will once again be participating in the SAE Aero Design competition as a part of the Regular Class competition. The Regular Class develops a fundamental understanding of aircraft design by focusing on heavy and volumetric payload. Having participated in the Regular Class competition for the past 3 years, we have been able to learn from the MKI, MKII, and MKIII aircraft. This year's design targets the maximum allowable wingspan of 10 feet to improve payload capacity and scoring potential. As opposed to attempting to maximize payload capacity, the 2026 ruleset awards points for the number of 2-litre

bottles, empty or full, the plane can carry. The key goal for us is to fit roughly 40 empty 2L bottles in the plane, the majority stored in the wings, to maximize points during the competition. After each successful flight, teams must increase payload for subsequent attempts, emphasizing iterative optimization rather than a single maximum-payload flight. Points are also awarded to the teams based on a Technical Report and Flight Readiness Presentation, which are to be completed by teams in the months before the competition in March. We are looking forward to seeing how other schools have decided to tackle this challenge, and are excited to put our design to the test!

KEY OBJECTIVES

- **Wingspan:** 10'
- **Payload:** Roughly 40, 2-litre empty bottles
- **Competition Placement:** Top 3 Teams



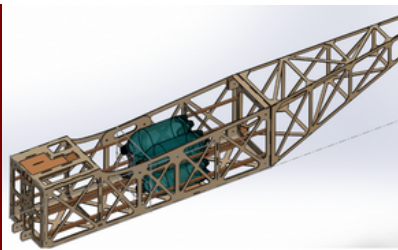
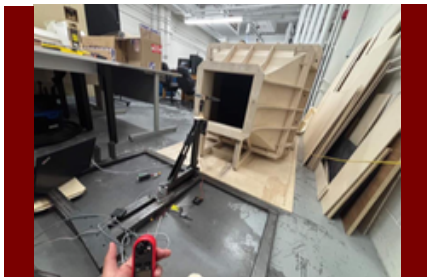
Looking back,

LOOKING FORWARD

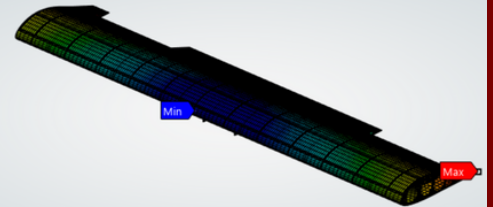
PREPARING FOR COMPETITION

As we move through another year, we find it important to reflect on how far we've come and prepare for the new season ahead! This year we have placed heavy focus on research and development; putting our designs and ideas to the test to help ensure our plane's success. We have completed test flights of the Mac Flyer Mk III, thrust testing with a wind tunnel, stress analysis of our wing, and much more.

Our team is looking forward to representing the school at competition this year and continue making international connections. It is a true privilege to have this opportunity, so thank you for your continued support!



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Engaging at

VISIBILITY EVENTS

FACULTY FEST

This fall, the McMaster Aerospace Team was thrilled to connect with hundreds of new and prospective students at two major university events. These opportunities allowed us to showcase our passion for aerospace and share the hands-on, collaborative spirit that defines our team.

We kicked off the semester by bringing the excitement of MAST to Faculty Fest during Welcome Week. Our display in the Hatch Centre area featured the 2025 competition plane, MkIII, drawing crowds of curious first-year students. Our members loved chatting with everyone who stopped by, sharing their personal experiences, and explaining the incredible learning that happens outside the classroom on our team.



FALL PREVIEW

The outreach continued as we opened our doors for McMaster's Fall Preview on October 25th and November 15th. Prospective students and their families got a firsthand look at our Hatch Centre workspace and our ongoing projects. It was a fantastic chance to demonstrate what being a MAST member is all about. Specifically, the innovation, the teamwork, and the thrill of turning ideas into a flying reality. We're always energized by these events and the chance to inspire the next generation of engineers.



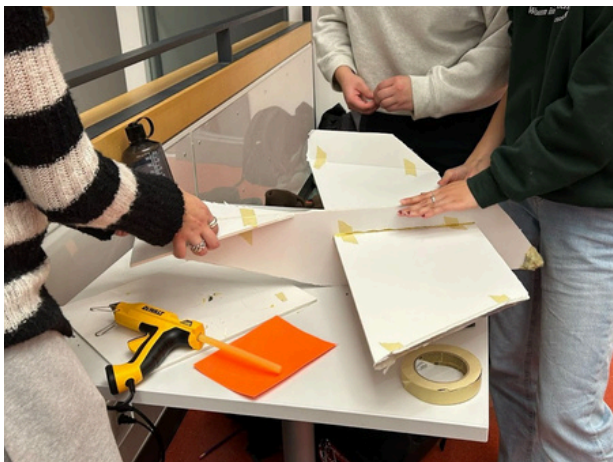
Engaging at

VISIBILITY EVENTS

WIE X MAST GLIDER BUILDING

This semester, MAST was excited to partner with McMaster's Women in Engineering to host an engaging and educational glider-building workshop! The event was designed to demystify the principles of flight for students from all faculties, welcoming anyone with an interest in aerospace.

The evening began with an interactive lesson where participants learned the fundamental concepts of aerodynamics and what makes an airplane fly. With this new knowledge, students formed small teams to put theory into practice. Using materials like styrofoam poster board and basic tools, as well as guidance from members on the MAST team, they designed and built their own unique gliders. For the final test, gliders were launched off the Gerald Hatch Centre balcony to see which design flew the farthest. It was a fantastic opportunity for students to gain hands-on experience, connect with like-minded peers, and share in the joy of creation and flight. We look forward to more collaborations that help inspire and build our community.



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