AERO MCGILL

2019 2020

SPONSORSHIP PACKAGE

AERO

MCGILL AEROSPACE DESIGN SOCIETY

Greetings,

As director of the McGill Aerospace Design Society, or AERO McGill, I would like to thank you for taking the time to read this package.

In 2020, we enter our sixth year of existence and we continue to attract talented students from a multitude of faculties at McGill as we seek to empower them to become the next generation of aerospace professionals. From highly automated multirotors to heavy-lift fixed-wing platforms and hand launched aircraft, our fleet is built by teams actively competing in the annual SAE Aero Design competitions and the Unmanned Systems Canada competition. Furthermore, we push the boundaries of flight with special initiatives to develop novel aircraft, such as a solar-powered UAV.

AERO McGill takes on a plethora of challenges in engineering, aviation and beyond. In previous years, we have explored air mobility, payload delivery, long range secure communications, survey, site inspection and professional flight operations. As we design, manufacture and operate remotely-piloted aircraft and unmanned aerial systems, we also develop the technical and interpersonal skills required for the success of our students in the aerospace industry.

However, as a student initiative, AERO McGill's activities would be impossible to sustain without the support from the community. Therefore, we reach out to you as we hope to form partnerships with members of the industry who are looking to invest in the future of aerospace.

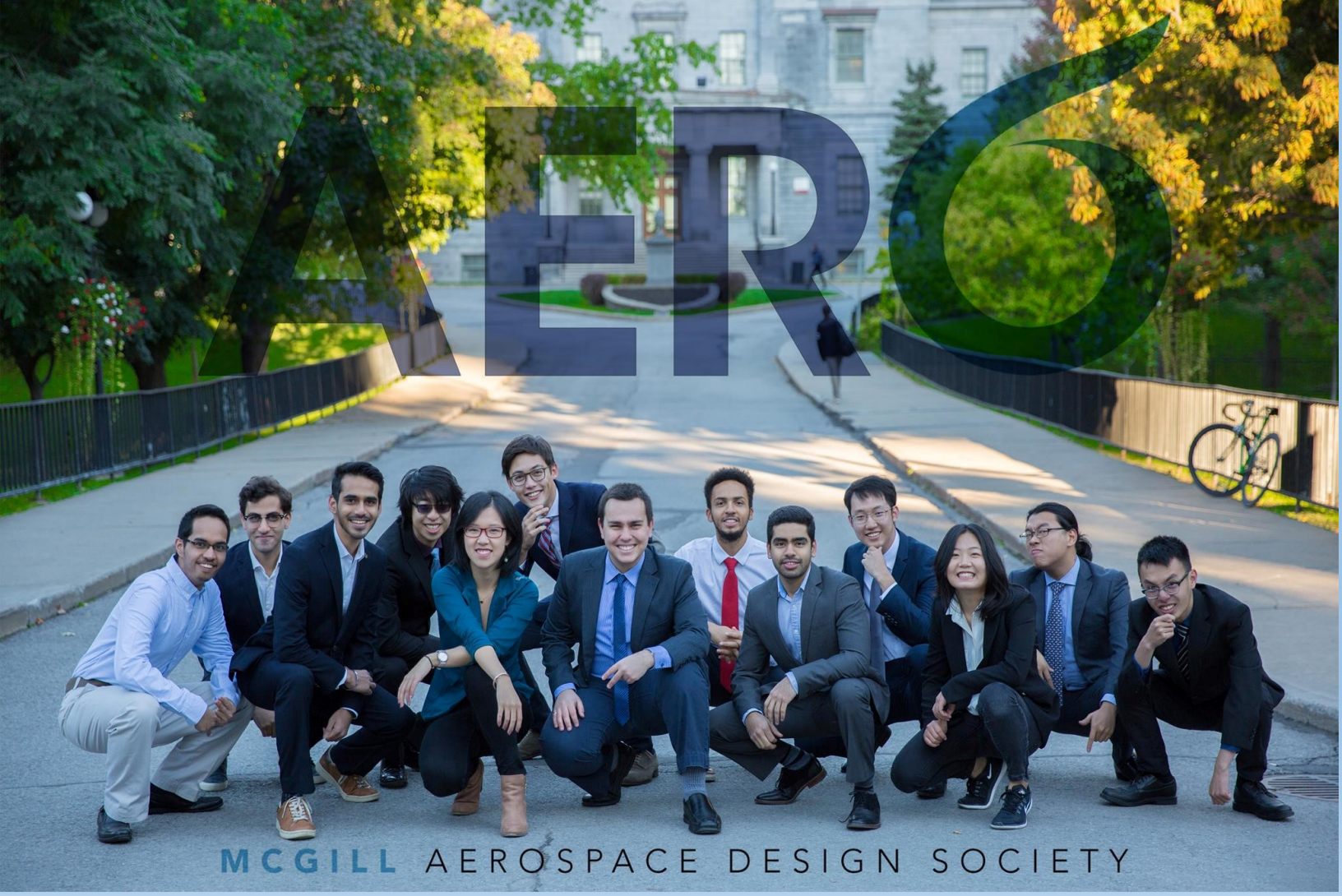
KoptR Image is a reputed leader in the domain of UAV training & services. Our pilots appreciate the capability of extended operations with an advanced pilot certificate. We would be grateful for any financial or relevant in-kind contribution such as reduced-cost flight reviews or flying area for our pilots that you are able to provide.

I write to you with the hope of starting a long-term relationship between our thriving society and distinguished industry members of your company.

Kind Regards,

Adam Targui
Director, AERO McGill

AERO



A. THE TAKEOFF

The McGill Aerospace Design Society was imagined by a group of students at McGill University with a shared passion for aerospace to enable like-minded members of the community to acquire hands-on experience that complements the classroom theoretical knowledge.

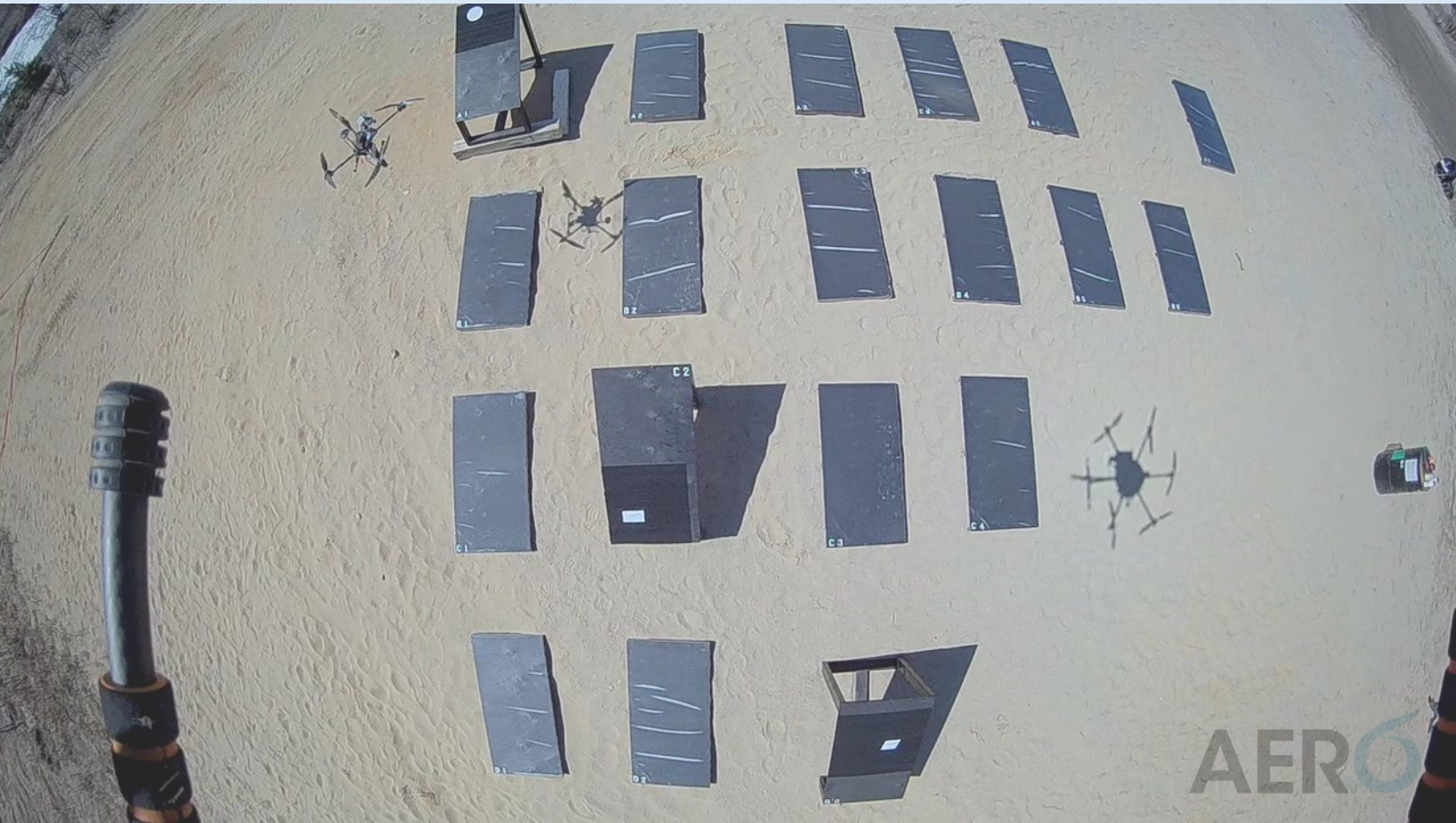
AERO McGill provides an opportunity to give our fellow students an environment to learn more about aircraft design and apply the topics covered in classes of fluid mechanics, computational aerodynamics, electronics, signals as well as aircraft performance, stability, and control. It also branches out to expose the students to basic concepts of flight safety, crew resource management and other aviation-oriented topics.

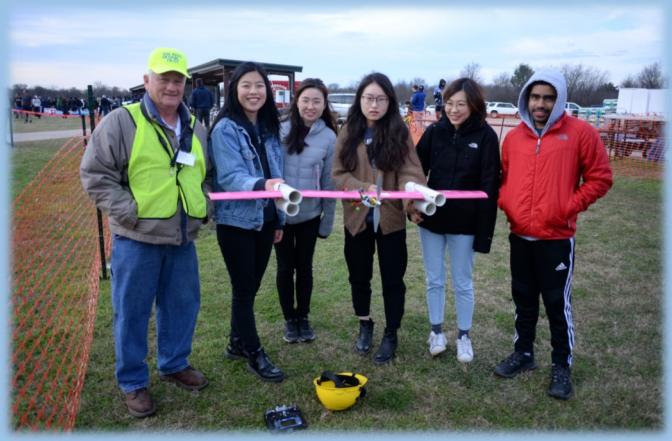
McGill offers a Master's program in Aerospace Engineering and our faculty conducts ground-breaking research in collaboration with the vast Montreal aerospace industry. There are over 40 faculty members at McGill who concentrate on aerospace-related research with over $20M per year in aerospace research programs and over 4,500 students in the Faculty of Engineering at McGill. With the new undergraduate aerospace minor making its debut this academic year, our organization is more relevant than ever to support the promotion of the domain in our community.

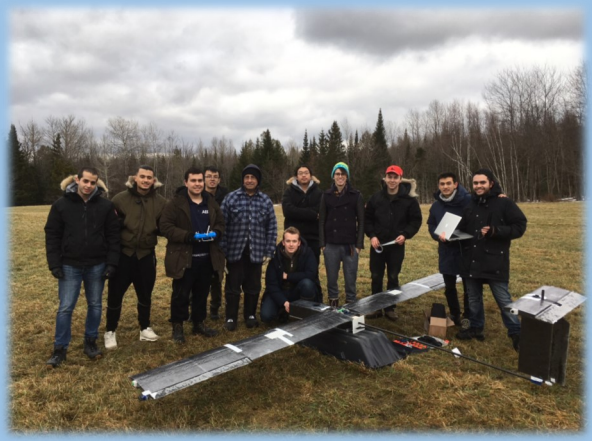
B. THE MISSION

The McGill Aerospace Design Society is a shared platform for aerospace engineering design teams at McGill. This allows students to take the initiative of creating a new aerospace project without undergoing all of the difficulties of starting a new team from scratch. With the McGill Aerospace Design Society, motivated students are provided with funding, resources, tools, shared experience and leadership to turn their passionate group into a high-performance team capable of undertaking their aerospace-related challenge. AERO McGill takes pride in its work culture and its obsession with perfecting the implementation of effective leadership at all levels of the society.

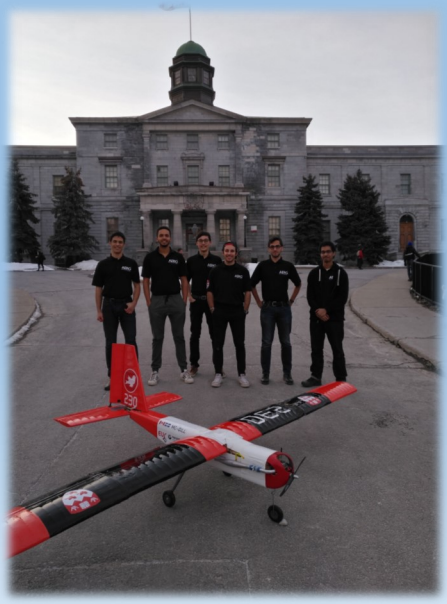
At the moment, we eagerly hope to expand the current group of design teams to include the AIAA competition in the future, as well as any other stimulating challenges that are brought forth by students. All project teams bear the AERO branding of the society, projecting a unified and collaborative image to the McGill community at large.





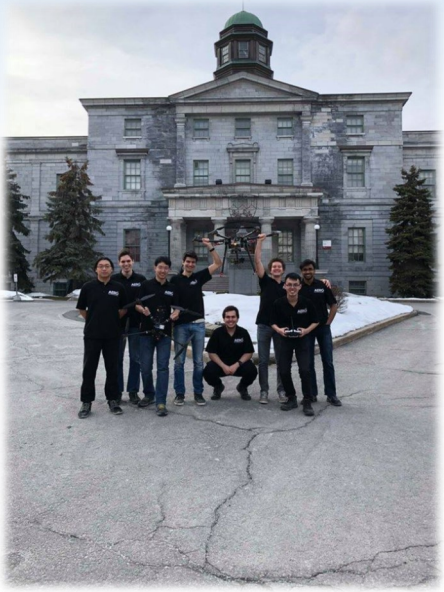


C. THE PROJECTS



SOLAR UAV TEAM: Since 2017, a team has been working on producing a non-competition solar powered aircraft. This continuous research project with academia aims to manufacture a fixed-wing UAV capable of extended flight for the purpose of large-scale surveying. This concept is made possible by an array of solar panels spanning the wings providing constant power to high energy density batteries.

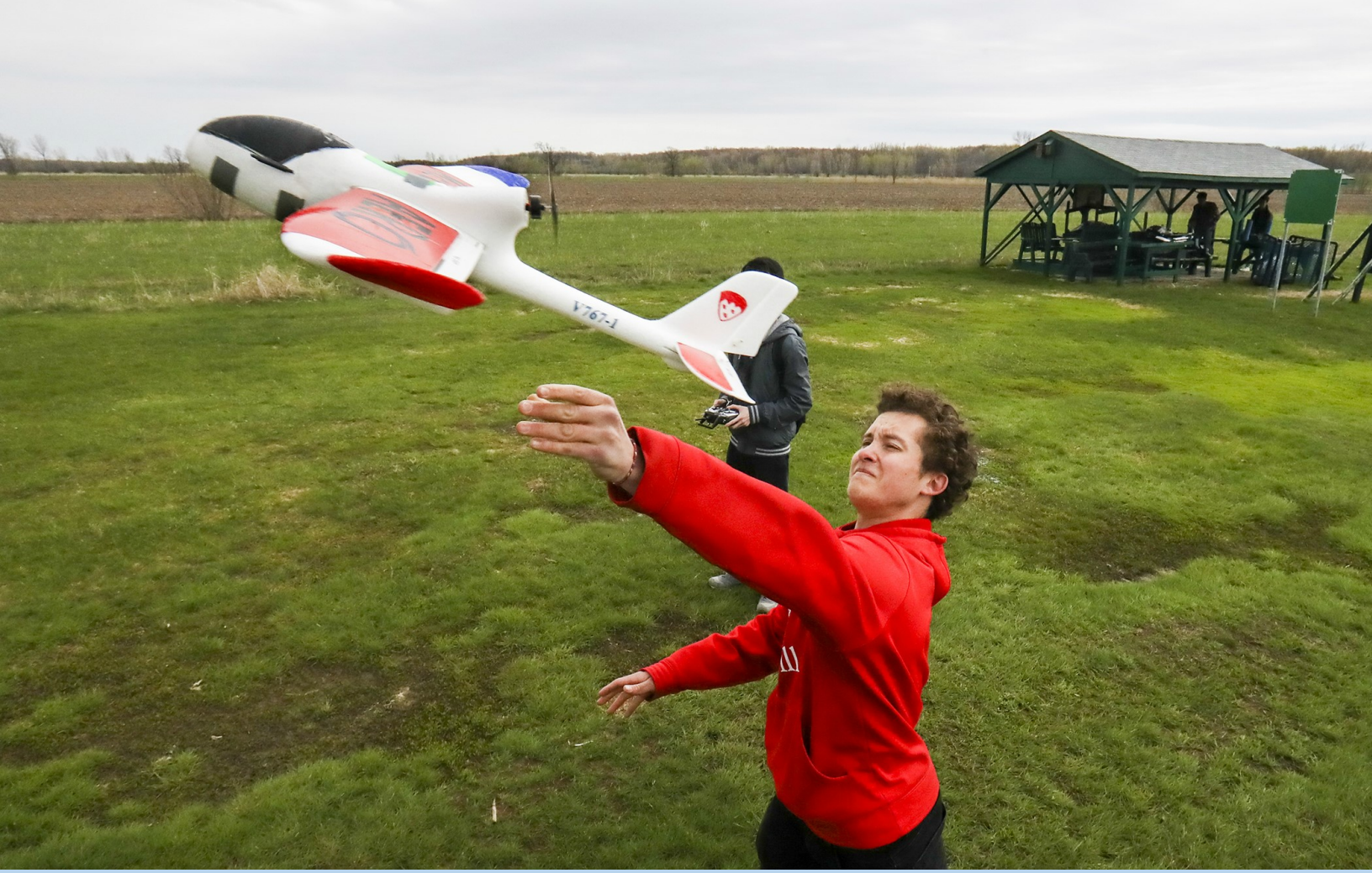
SAE AERO DESIGN MICRO: AERO McGill will once again be competing in the Micro Class edition of the SAE Aero Design Series. The objective is to design, build, and assemble a hand-launched, remote-controlled, fixed-wing aircraft. Points are earned for carrying heavy payloads while minimizing the weight of the aircraft.



SAE AERO DESIGN ADVANCED: AERO McGill will compete in the Advanced Class of the SAE Aero Design Series. The objective is to design, build, and assemble a remote controlled or semi-autonomous aircraft. The mission is to fly the aircraft around a course and drop multiple packages on target in a designated drop-zone. Points are earned for how close to the “bullseye” the packages hit.

UNMANNED SYSTEMS CANADA: After earning three awards in the 2019 competition year, AERO McGill will continue competing in the Unmanned Systems Canada competition in 2020. The objective is to design, build, and assemble a highly automated fixed-wing or multirotor aircraft fitted with advanced systems. The competition’s scenario is changed annually. However, the vehicles must have a gross weight of less than 10kg and be capable of completing a variety of ground oriented tasks such as terrain mapping and target analysis.

AERO



D. THE REACH

Our students are active community members and participate in national and international events. From promoting aerospace in local high schools to attending the Paris Air Show, our students roam their surroundings in the quest to share and nurture their passion.

Digitally, our social media presence spans Facebook, Instagram and LinkedIn. We run weekly posts on our Facebook page and Instagram accounts with our long running #FlightFriday and #TechTuesday series which cater to the interest of the community. As of August 2019, our Facebook posts have reached a cumulative 20 000 members since the beginning of the year.

We proudly wear our t-shirts wherever we go, conducting ourselves as ambassadors of the STEM domain. You can be assured that the visibility this team offers to your company will be far reaching and carried by individuals of the utmost dedication.

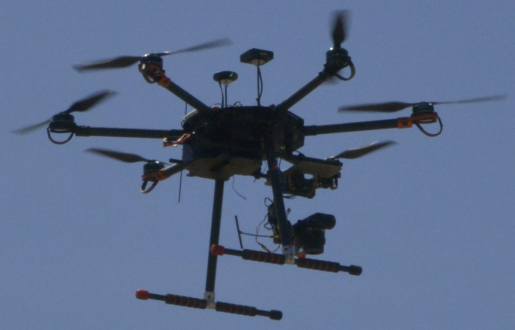
E. THE TIMELINE

AUGUST-OCTOBER 2019	RECRUITMENT CAMPAIGN
NOVEMBER 2019	SOCIETY DESIGN REVIEW 1
JANUARY 2020	UNMANNED SYSTEMS CANADA TECHNICAL PAPER
	SAE AERO DESIGN TECHNICAL PAPER
FEBRUARY 2020	SOCIETY DESIGN REVIEW 2
MARCH 2020	 SAE AERO DESIGN COMPETITION
MAY 2020	 UNMANNED SYSTEMS CANADA COMPETITION
	YEARLY DEBRIEF & AWARDS CEREMONY

SPONSORSHIP TIERS

	GOLD 2500 C$	SILVER 1500 C$	BRONZE 500 C$
Company logo on competition aircraft	✈		
Access to student CV database	✈	✈	
Social media recognition	✈	✈	✈
Personalized thank you note	✈	✈	✈
Logo on team t-shirt and website	✈	✈	✈

AERO



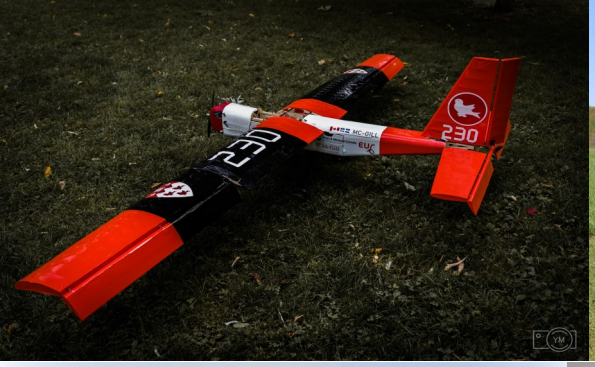
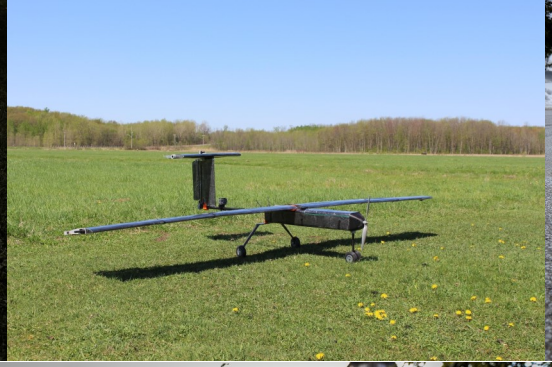
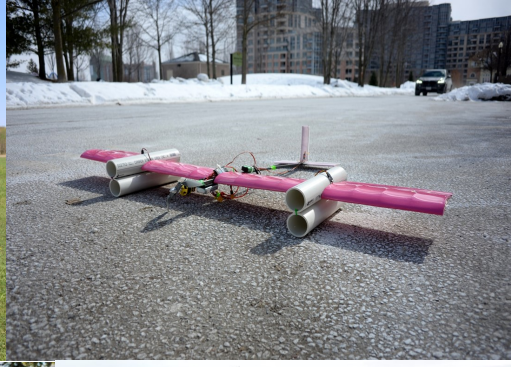
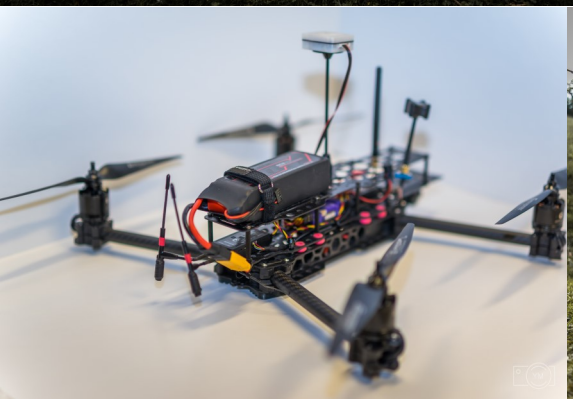
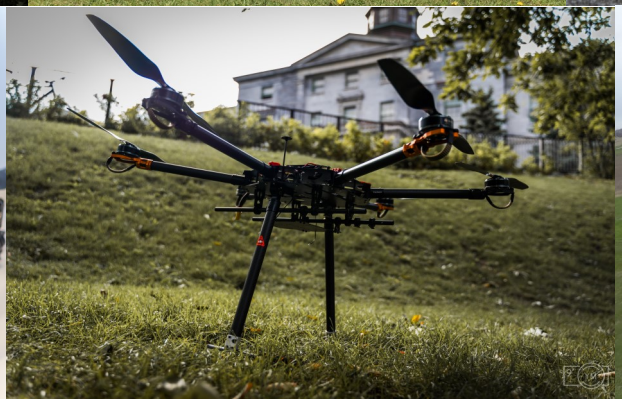
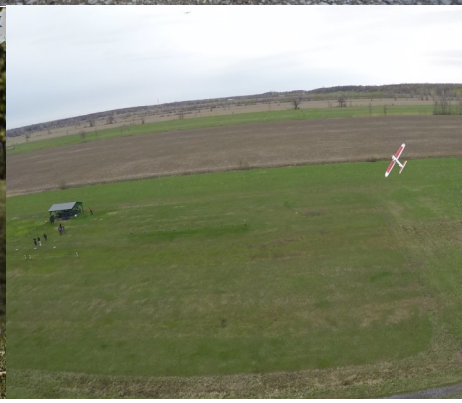
CONTACT

AEROMCGILL.COM

+1 514 433 7821

AERO.PRESIDENT@MCGILLEUS.CA

facebook.com/AEROMCGILL

AERO

MCGILL AEROSPACE DESIGN SOCIETY