



# WARG

*Waterloo Aerial Robotics Group*

# SPONSORSHIP PACKAGE



UNIVERSITY OF  
**WATERLOO**

## WHO WE ARE

The Waterloo Aerial Robotics Group was founded in 1997 by a small group of computer engineering students who were passionate about autonomous aircraft systems. More than 20 years later, incoming students work to carry on the legacy of those who have graduated by taking on new and innovative projects, pushing the limits of the UAV industry.

Each year, WARG competes in the Unmanned Systems Canada competition to demonstrate our system's effectiveness to industry professionals from across Canada. Throughout these projects, our mission has always been to design and develop a robust autonomous aircraft system, which can be modified for a variety of surveillance and object retrieval objectives.



## WHAT WE DO

The Unmanned Systems Canada Student UAV Competition is a three-day event in which WARG's unmanned aircraft system must autonomously complete mission specific tasks. These tasks include detecting targets on the ground, object transport, and object retrieval.



Our computer vision system performs live processing of HD video during flight, effectively mapping images to geolocations and detecting targets on the ground during competition. Our tracking antenna enhances the range of WARG's UAVs using an intelligent tracking system.

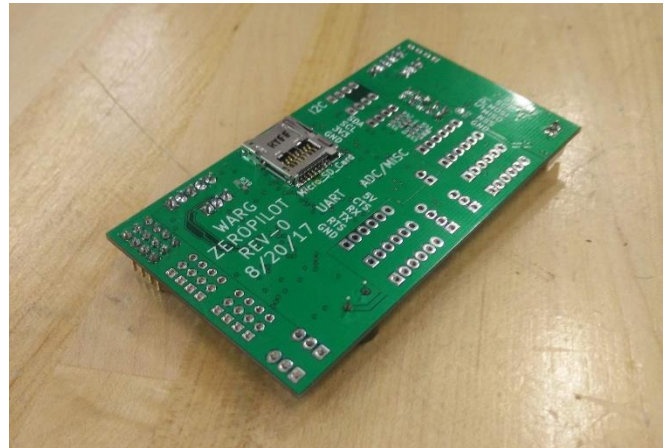
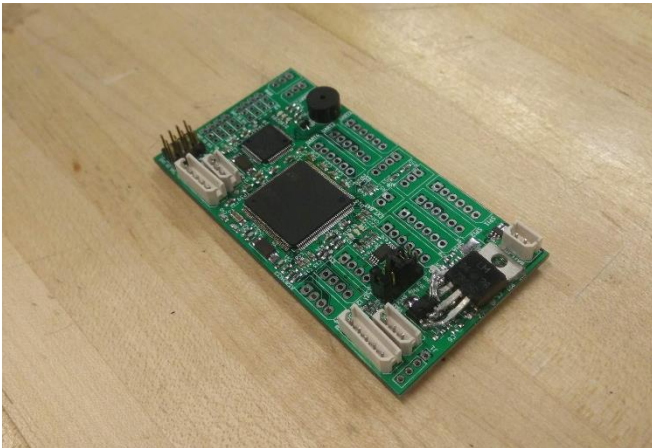
Our mechanical, electrical, and software systems are designed to complete competition objectives autonomously.



# INNOVATION

WARG prides itself on designing and developing all of our systems from the ground up. WARG is the **only** team at the USC competition with an unmanned aerial system developed entirely in house.

## ZeroPilot

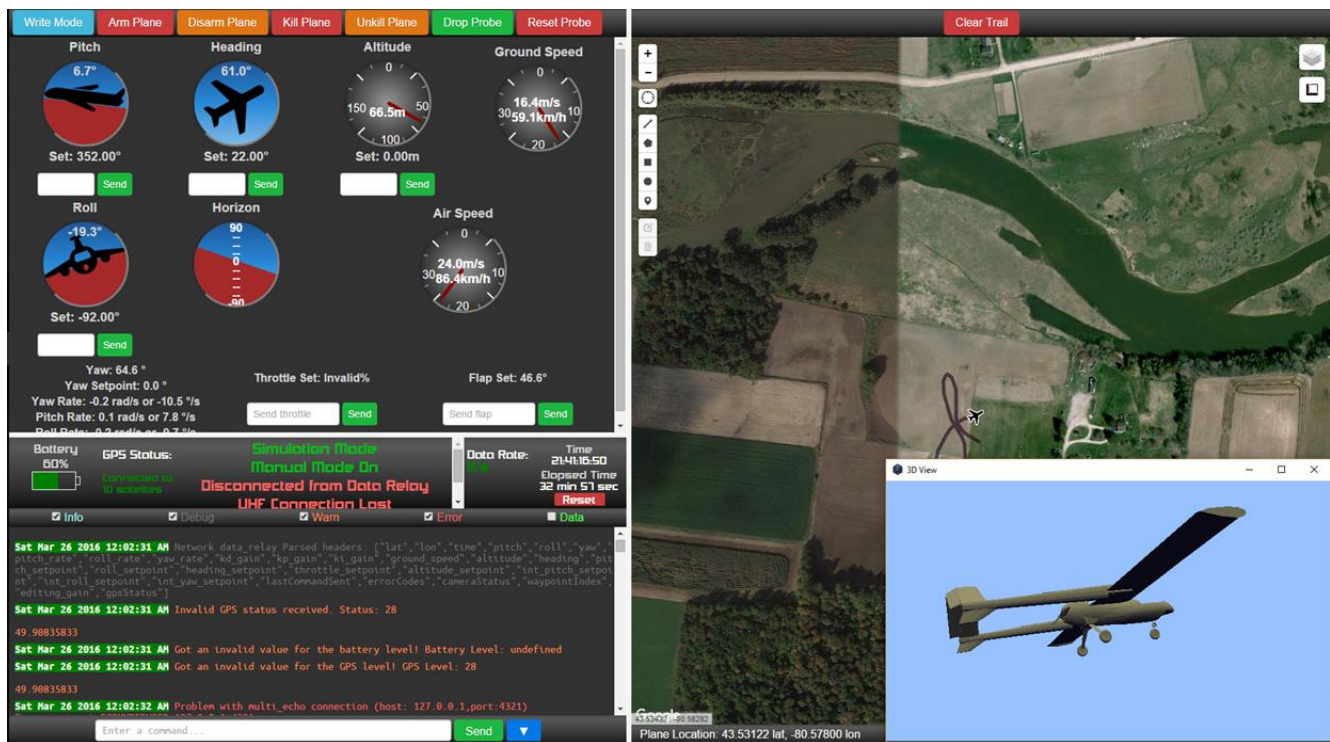


ZeroPilot is WARG's custom built autopilot system, aiding aircraft with navigation and increasing autonomy. Path management, attitude management, and sensor management are all regulated through this custom autopilot board.

# INNOVATION

## Ground Station

Our ground station interface provides live telemetry information from our aircraft. This interface allows for flight path planning and adjustment in real time.



# INNOVATION

## Boreas

Boreas is the newest addition to WARG's fleet of autonomous aircraft. Still in the early stages, this twin motor electric plane promises to have an innovative fiberglass airframe design and 4 kg payload capacity. The aircraft's long-range capabilities and 90 minutes of flight time will prove to be major assets during competitions.



The future for Boreas is exciting, as plans include entering future AUVSI Student Unmanned Aerial Systems Competitions.

# SPONSORSHIPS

The Waterloo Aerial Robotics Group would not exist and could not operate were it not for the assistance provided by sponsors. If you own or represent a company or organization, we encourage you to consider sponsoring our exciting entry into the Aerial Robotics Competition.

## Market

The University of Waterloo is one of Canada's top engineering schools. Our workshop is located in a high-traffic area, where our sponsor's logos are provided exposure to young engineers, computer scientists, faculty, and visitors alike.

## Advertising

Apparel provided at any sponsorship level will be worn by members of the team in the workshop and around campus. Promotional photos of the team wearing the provided apparel will also be provided upon request.

## SPONSORSHIPS

### Ground Crew – (\$100 to \$499)

Small logo in workshop window

Small logo on team apparel

Small logo on website

### Take Off – (\$500 to \$999)

Small logo on competition aircraft

Medium logo in workshop window

Medium logo on team apparel

Medium logo on website

### High Flyer – (\$1000+)

Large logo on competition plane

Large logo in workshop window

Large logo on team apparel

Large logo on website



# THANK YOU

## FOR YOUR CONSIDERATION

### Contact Us:

Email:

[contact@uwarg.com](mailto:contact@uwarg.com)

Websites:

[www.uwarg.com](http://www.uwarg.com)

[facebook.com/UWaterlooWARG](https://facebook.com/UWaterlooWARG)

Mailing Address:

Waterloo Aerial Robotics Group  
c/o Mark Dunk

Engineering 5 – Room 2001  
200 University Avenue West  
Waterloo, ON, Canada N2L 3G1



*Waterloo Aerial Robotics Group*



UNIVERSITY OF  
**WATERLOO**