



Unmanned Systems  
Systèmes Télécommandés

**CANADA**

## Student Unmanned Aircraft Systems Competition - 16 Teams Aim to Light Up Lac Saint-Jean Area

21 November 2016

There is a power struggle shaping up in Quebec's Lac Saint-Jean region. It is between student teams who will be vying to fix damaged solar panels using their custom designed UAS as part of the Unmanned Systems Canada Student UAS Competition. Teams from 16 Canadian universities and colleges will be participating, including first time competitors from the British Columbia Institute of Technology, University of British Columbia - Okanagan, University of Manitoba, and a new team from Montreal's École Polytechnique. Once again Centre d'Excellence sur les Drone - CED Alma, Quebec will open its doors to host the competition from May 3-5, 2019, the 11<sup>th</sup> annual event.

Solar power is the fastest growing source of new energy. Given that solar farms can range in size from 1 to 100 acres, UAVs are now being deployed to provide imagery of damaged solar panels, a more accurate method than inspectors using handheld cameras. The mission for the competition is to provide support to a utility company after a wind storm. Tasks include surveying a solar farm, locating major damage to individual panels, identifying significant changes to the solar field, and placing inspection markers adjacent to critical cells on damaged panels.

This is a "made in Canada" simulated Beyond Visual Line of Sight (BVLOS) scenario. Although the UAV will be required to go BVLOS, the competition spotters will have the drone in sight at all times.

The scenario is designed to attract both fixed and rotary wing UAS. Will one platform have an advantage? Will there be a unique solution? Each year the bar is raised to attract first class teams with innovative ideas. The judging starts with each team making a company "pitch" featuring their system, individual talent, and approach to solving the problem. Then the flying phase; competitive in the sky but collaborative in the hangar. Veteran teams are on hand to help rookies pick up the pieces. The last task is a written report on the findings submitted to the judges upon the completion of the flights.

The competition is designed and judged by a dedicated group of Unmanned Systems Canada experts along with industry sponsors, and is supported by local volunteers. Through various activities with students, the association is helping to foster greater success in the future of Canadian UAS industry.

Thanks to the support and on - site enthusiasm from sponsors, this world class event provides opportunities for the best and brightest to display leadership, problem solving and team work all in a stressful competitive environment; a real-life job interview.

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Results have paid off as many UAS competitors have been hired by a sponsoring company.

Sponsors are wowed at the talent in action and are proud to have their logo in direct line of sight. When tested on the international stage, our Canadian teams not only take-home various awards, but consistently place at or near the top. To become involved as a sponsor, and to support and celebrate the future of the Canadian UAS sector, contact [competition@unmannedsystems.ca](mailto:competition@unmannedsystems.ca)

## 2019 UAS Competition Teams

British Columbia Institute of Technology - BCIT MERC

Carleton University – Blackbird

Concordia University – UAV Concordia

École Polytechnique – Élikos

École de technologie Supérieure- ETS – Dronolab

McGill University – Aero McGill Drones

Queens University – Queens Aero Design Team

Ryerson University – RUAV

Simon Fraser University – Team Guardian

University of British Columbia – UBC UAS

University of British Columbia - Okanagan – UBC AERO

University of Manitoba – Snowy Owl

Université de Sherbrooke - VAMUdeS

University of Toronto – Aerial Robotics Division

University of Toronto – UAV Division

University of Victoria – UVic Aero





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Competition details are at <https://www.unmannedsystems.ca/home/students/student-competition-details/>

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