

## CASI Ottawa 2019 Annual Report

The Ottawa branch of CASI continues to focus on aerospace community development through technical meetings, tours and especially engagement of the students in our region. We continue to look for opportunities by working with other branches and through the organizational linkages provided by HQ initiatives. Resources continue to limit our ability to respond to challenges in membership engagement. As a summary, we held or participated in 11 events with 96 members and 249 others in 2019.

**January 25, 2019 Carleton University CMAS Industry Night:** Jeff Bird represented CASI at this meet and greet night. He met many students who paid for the opportunity to chat with about 20 industry and professional members of the mechanical and aerospace community. Job prospects were certainly subjects, but particular attention was given to networking needs, opportunities like membership and especially CASI Connect, as well as upgrading skills and knowledge through on-line courses. Other CASI members from MDS, GasTOPS and NRC participated. Attendance: Members 8, Others 50.

**February 26 and 27, 2019 Opportunities with High Altitude Pseudo-Satellites (HAPS):** Dr. Jacques



Giroux President, Canadian Aeronautics and Space Institute gave talks at both Carleton and uOttawa as part of his president's tour. His interesting talk on Canadian technology and business successes was well received by the diverse audience. CMAS and Prof. Mavriplis hosted the events and provided

delicious snacks. Attendance at Carleton Feb. 26: Members 8 and Others 15 and Attendance at uOttawa Feb. 27: Members 5 and Others 8

**March 20, 2019 Experience in Aerospace - People, Places and Planes:** Peter Maddocks reprised his talk for the staff and some cadets at RMC as an outreach for the branch. RMC hospitality and enthusiasm were noteworthy and CASI benefits and connections were well presented. Attendance: Members 5, Others 25

**April 9, 2019 Member Tour of NRC Centre for Air Travel Research:** Malcolm Imray, Viresh



Wickramasinghe and Paul Lebbin Facility Manager introduced members to the R&D program, and showed the extensive facilities built for the program. The highly multi-disciplinary activities and the integration of NRC and industry capabilities were most impressive. Attendance: Members 14, Others 5

**June 26, 2019 Turbofans for Business Jets:** Herb Saravanamuttoo, our most dedicated member gave a most interesting history, business and engineering talk at our annual dinner meeting held at the Clocktower Brew Pub in Westboro. Progressions and rationale were woven into an enlightening evening with many old friends. Geoff L. provided important support especially with CASI Recognition Certificates for Herb and Ben Tahir. Attendance: Members 18, Others 8

**October 4 2019 Paper Airplane Contest and Model Flying Family Event:** Paul Penna our dedicated



emeritus branch chair reprised his annual flying night at Carleton for students, members and their families to learn about the skills, engineering and technology of small Radio-Controlled model aircraft and to observe actual flying demonstrations at an indoor venue. Over 100 took part in the paper airplane context and enjoyed pizza supplied by CASI and CMAS. Many stayed for the presentation and a chance to fly some models themselves. Attendance: Members 10, Others 58

**November 7, 2019 CASI-CMAS Planning Meeting:** Jeff Bird presented and participated in a CMAS meeting to discuss options for a student branch and student CASI members. Background on CASI included participating organizations (both local and national), strengths and benefits for students and younger members. Discussion items were: recruiting for CASI junior members (\$35/year), strengthening the CMAS offering, Connections to national and local events, financial and outreach support is possible from CASI on per head and special activity basis and targeted mentorship and industry engagement by sub-speciality of direct help to students, under-grad and graduate and limitations on student awareness of CASI and ability to find 5\$ extra. Attendance: Members 5, Others 35.

**November 7, 2019: Remotely Piloted Aircraft Systems – Perspectives from Government, Academia and Industry** - Prof. Jeremy Laliberté assembled a UAS panel with enlightening presentations from Industry-Mr. Charles Blouin, RC Benchmark, Government- Dr. Laurel Sinclair, NRCAN and Academia Dr. Stephanie Carvin, Carleton University. Carleton's new NSERC CREATE Uninhabited aircraft systems Training, Innovation and Leadership Initiative (UTILI) was introduced. Presentations and enthusiastic discussions covered public policy issues, entrepreneurship opportunities, and public safety applications of modern drone systems. Following the presentations the open Q&A session covered many topics. Carleton provided light refreshments which were enjoyed by all. The need for more workshops between the technology and policy communities was highlighted as a role for CASI. Attendance: Members 10, Others 7

**November 12 and December 4, 2019: Trends in Aerodynamic Test Facility Business- An Update since the CASI 2008 Presentation:** Dr. Gary Elfstrom, long time CASI member and supporter presented at both Carleton and uOttawa. He is VP Aiolos Engineering Corporation, Adjunct Professor Ontario Tech University and P. Eng (and NRC Aerodynamics laboratory alumnus). The lively talk included exciting Canadian engineering and business success stories with impact internationally in automotive (cars, trucks, racing, climatic, acoustic, emissions), aeronautical (low and high speed, and avian!), and industrial R&D applications. This is the Canadian company's 25th anniversary! Professor Mavriplis and her fourth year aero course hosted the uOttawa meeting with fabulous food and treats. uOttawa Attendance Nov 12: Members 5, Others 30 and Carleton Attendance December 4: Members 7, Other 9.

### Branch Outreach

1. uOttawa Student branch: Continuing organizational planning support is necessary: Technical talk by Peter Maddocks on careers in fall 2019, planning for rocket competition as pilot for possible national competition
  - a. Connection with Ottawa Model Rocket Club is on-going for range access and also possible support for DND approvals which are now long delayed

2. RMC for local CASI members: Technical talk by Peter Maddocks- spring 2019; Follow-on for academic year 2019-20 for academic staff and engagement of new military officers
3. Intra-branch meetings with Toronto and Quebec to identify best practices, topic/speakers to share and useful central support.

### Issues

1. Membership support and growth through improved value proposition
2. Implementation of attendee charges for meetings directed by HQ
3. Renewal of executive members

### Planning

1. Other meetings in planning- small aerospace businesses- Derivation Research Laboratory, LightFoot Sustainability, MemberTours of TSB lab, Hybrid Electric Aircraft
2. Rocket Competition- Working with Matt Sehri the chair of the uOttawa student group a rocketry completion plan was developed that could be trialled in the Ottawa area and scaled up to a national, virtual completion using rocket clubs and sites across the country.
3. CMAS development: It appears that CASI strengths are of interest to them: National access to speakers and industry (job board), Access to aero/astro conferences, short courses and student summits, CASI-Connect Student mentorship program with industry experts and Student bursaries and awards. Their strengths for us: Diverse student and volunteer connection, Existing dedicated executive, Existing program and logistics, and Enthusiasm for careers.
4. uOttawa Student Branch needs dedicated and structured support which will be well supported by Prof. Mavriplis.
5. Graduate student engagement: Both Carleton and uOttawa graduate students are an unengaged but promising demographic. Systems and computer engineering departments are also to be addressed as they are likely most interested in aerospace applications. More engagement from Carleton and uOttawa faculty should be encouraged.
6. RMC support is to be organized for engagement of DND and its engineering and other staff.
7. Contributions to the evolving CASI strategic plan renewal based on feedback on the existing plan.
8. COVID-19: Exploring technology and format solutions to facilitate safe, virtual branch meetings.

Respectfully submitted- Jeff Bird and Omer Majeed co-chairs