SAE INTERNATIONAL

British Columbia Section Newsletter

November 2011

Section website; www.saebc.org

December Meeting

Monday December 12th

Tour of Westport Asembly Centre

1545 Cliveden Avenue

Annacis Island, Delta

5.30 pm

Attendance limited to 30

Contact Colin Blair for reservations (cblair@westport.com), 604-809-6461

Westport Innovations Inc. is a leading global provider of proprietary technology that allows engines to operate on clean-burning gaseous fuels such as compressed natural gas (CNG).

Westport has an assembly centre on Annacis Island where the Westport GX engines (based on the Cummins ISX diesel engine) and LNG fuel tanks are assembled and tested.

The SAE BC section is invited for a tour of the facility on Monday Dec 12th starting at 5:30 pm. Please make your reservations early by contacting Colin Blair.

Future Meeting & Tour planning

The December tour will be the last for this year and the Governing Board would like to remind all members that tour ideas or offers from anyone who can host visits to local industries and plants would be most helpful in planning future events. If you have any suggestions please pass them on to Section Chair Elise Woolliams at Elise.Woolliams@afcc-auto.com

Students Night Report

The annual SAE BC Student Night was held on Tuesday Oct 4th at the new UBC Engineering Design Centre (EDC). Although the EDC hadn't been officially opened yet, we had the opportunity to be the first group to use the facility for a formal purpose.

The new centre offers an exquisite space for students to work on their extra-curricular projects, with access to overhead cranes, bench space, study areas, overhead projectors and more.

Pizza and drinks were graciously provided to all, with more than 40 students and SAE members in attendance. We also took the opportunity to signup several new student members at the event, and this even sparked a resurrection of the student chapter for SAE BC, led by the new involvement of Edward Chan who attended the last monthly chapter meeting.

After an hour or so of social networking and viewing several student "works in progress", travelling SAE representative Diane McGuire (from SAE head office) made a brief speech of encouragement and congratulations which was followed by formal presentations from approximately 10 different student teams. This really showcased the variety and depth of activities from two premier engineering schools in BC including;

- UBC Supermileage
- UBC Heavy Lift
- UBC Electric Vehicle
- UBC Formula Team
- UBC Sailboat
- UBC Human Powered Submarine
- UBC Baja Team
- UBC "Soccer Bots" Team
- UVIC Formula Team
- UVIC ECO Car Project

Notable standouts included the UVIC team who had travelled all the way from Victoria to make their presentation, (including riveting video footage from a cockpit vantage point in their Formula car racing through the course, while pulling tire squealing g-forces in the corners), the Sailboat team (who had competed head to head with a team from the Canadian Navy in an autonomous sailing competition and narrowly conceded defeat by the slimmest of margins… (gonna win next year for sure!), and the Electric Team (who converted the ever popular VW Bug into an electric drive and tested it all the way to Edmonton and back –brave souls).

Surprisingly the most unusual, and perhaps the most interesting was the "Soccer Bots" team who developed artificially intelligent "bots" that would play a game of soccer in head to head competition with other teams.

At first this seemed like a silly concept, but upon further examination there was a clear link to modern advances in on-board vehicle controls and operations such as parallel parking, reverse cameras and proximity sensors, and finally the possibility of networking all vehicles in daily traffic to reduce accidents and traffic congestion).

After the student presentation was over, two AFCC employees who are former members of The Ohio State University's Buckeye Bullet2 team (Ed Hillstrom and Mike Proctor) made a presentation about their land speed record-setting electric streamliner. This vehicle started off as a student project much like that of the students who presented earlier in evening, and went on to set a record now found in the 2011 Guinness Book of World Records for the worlds fastest electric vehicle…and it was powered by hydrogen fuel cells donated by Ballard Power Systems.

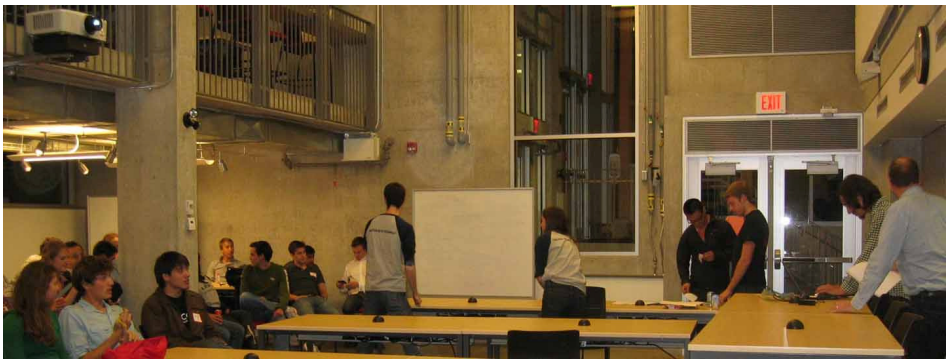
This project took four years to complete, setting the record on the very last trial run on the salt flats of Utah, on the very last day of competition, in the final year of funding from the university.

The main message relayed to the current students was that large goals are rarely achieved in the first year of competition, and that only by trial and experience does one gain the knowledge, fortitude and character to persevere and conquer one's goals. There are lessons to be learned even in defeat, and that it is the journey that matters.

All in all, the event was a huge success -even better than last year! We look forward to seeing the progression of the students next year, along with their fresh ideas and energies that are so intoxicating to be around. We encourage all SAE BC members to take the opportunity to re-live their "glory days" by attending next year's event and lending their advice to some young and eager minds.

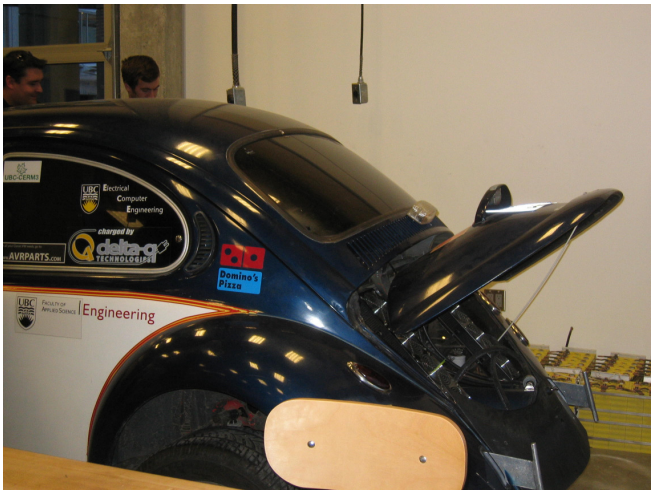
Report by Colin Keddie

Pictures by Martin Jackson



Student audience

SAE HQ rep Dianne McGuire



E-Bug

E-Bug battery pack

This will be the last Newsletter for the current year, and the BC Section Governing Board wishes to extend the compliments of the Season to all members and their families for a safe and happy Christmas and New Year holiday.

Leslie J Hart, Editor
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