Volume 2016-2017 Edition 2

November 2016

An SAE International® Section

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- WHAT: Go-Karting!
- WHEN: Monday, November 28th, 2016: 5:30-8:00 pm
- WHERE: TBC Indoor Racing, 2100 Viceroy PI, Richmond, click here for a map.
- **COST:** \$30 Please bring cash. Discounted rates will apply to members and students. Discount value TBC, based on attendance. This will get you two races, refreshments, and quality time with your fellow SAE members
- **RSVP:** <u>Please RSVP using this link.</u>: <u>http://register.saebritishcolumbia.org/</u> And email: <u>info@saebritishcolumbia.org</u> for more information
- **DETAILS:** Be there at 5:30 pm sharp! Safety training will be provided before racing begins.
 - Registration is mandatory and closes on the 21st at noon.
 - This event will be cancelled if a minimum of 15 people do not register.
 - Space is limited to 30 racers.
 - An unofficial after-party will be held off-site, with the venue to be announced.
 - If you've never go-karted before, don't worry it's as safe as it is fun. We look forward to seeing you there!

Note: Registration is mandatory and closes at noon on the 21st



SUMMARY OF LAST MONTH'S EVENT: Tour of the City of Vancouver's Electric Vehicle Fleet Operations Centre



Seventeen SAE members and guests attended our October technical event, which was hosted by the City of Vancouver Equipment Services Branch at the Manitoba Works Yard.

Amy Sidwell, Manager of Equipment Services Branch delivered a presentation on the background greening of the City Fleet including light duty electric vehicles (EVs) and medium to heavy duty compressed natural gas (CNG) vehicles. It was interesting to learn that Vancouver's fleet of approximately 1,830 rolling stock units emitted almost 16,000 tons of emissions in 2015, which is actually 13% lower than 2007 emissions, helped in part with through introduction of 33 EVs and 31 CNG vehicles. As reducing cost is also important, it was great to hear that the EVs save the city \$600 per year each as compared to equivalent traditional vehicles and this savings includes the purchase cost amortized over 10 years. Amy told us they would ultimately have a total of 115 EVs and 60 CNG vehicles in the city's fleet, with many EVs being bought in the next two years.

Ian Neville, Climate Policy Analyst with the Sustainability Group, presented the city's EV Ecosystem Strategy. Vancouver currently owns 29 Level 2 EV charge stations and one Level 3 DC fast charger. The charging infrastructure will see a boost with a \$3M capital investments happening over the next five years. By 2020, Vancouver expects to see 200,000 EVs in use in Vancouver.

Evan Dacey, Equipment Engineer, took us on a tour of the Manitoba Yard's EV charging infrastructure and showed us a few of the EV fleet vehicles. Taller vehicle drivers are less enthusiastic about the EVs owing to the vehicle's smaller size, but everyone loves the acceleration (I had visions of City of Vancouver vehicles racing light to light down the city streets). Reliability and performance of the EVs has been very good for the time Vancouver has owned them, with the only problem noted as being a couple of low 12V batteries. They are looking for the best use of these vehicles and used them for a while for parking enforcement, but the batteries of the Mitsubishi iMieve are a little small (these vehicles have to drive a double shift with limited time for recharge). Evan showed us the slow and fast CNG refuelling infrastructure too. The CNG vehicles (mainly garbage trucks) stay connected all night on the slow charge.



Please follow the link to the full photo album from the event : <u>https://goo.gl/photos/tj9egRLR4bbA5Vey7</u>



SUMMARY OF LAST MONTH'S EVENT: Student Night

At SAE BC's annual Student Night event, around 25 guests were honoured by excellent presentations by the SAE design competition teams. UBC Formula, UBC Baja, UBC AeroDesign, BCIT Racing Baja, and UBC Supermileage all took their turns presenting their vehicles and competition years, and the event ended with a first look at the latest addition to the SAE BC Collegiate Design Series family, UBC Formula Electric!

It was a well-attended, enthusiastic event. We look forward to the teams' success stories this year, and their entries in the SAE BC Student Sponsorship Competition.



2016-17 SEASON'S TENTATIVE SCHEDULE

Below is a list of the upcoming events for this season. *Please mark your calendars!* Events are held on Mondays unless stated otherwise. Please note that the Board Meetings are open to anyone. Please let one of the board members know if you are interested in attending and/or getting involved!

Winter Social/Networking Event
Board Meeting
Board Meeting
Board Meeting
PACCAR Technical Center Tour
Board Meeting
Board Meeting
Board Meeting



QUESTION OF THE MONTH

Every month we will be asking a new mobility related question and post the best answers from last month.

This month's question:

"What's the fastest vehicle you have driven and how fast did you go?"

Please email your answer to: <u>info@saebritishcolumbia.org</u> or enter your answer while filling out the online <u>registration form for the upcoming event</u>.

Select responses to last month's question:

"What was your best and/or worst test drive or rental car experience?"

• Thrifty Car Rental in Las Vegas. I learned of the intangible cost of dealing with an off-airport car rental - I missed a flight because they nit-picked about a ding that clearly happened in a parking lot. I had to fill out forms in triplicate and initial all sorts of legal crap. By comparison, if you've ever returned a car Hertz lot at the Chicago airport, you know you step away from the car with it still running and go and catch your plane - no questions asked.

• Driving a rented Chevy Cruze up to the top of Mauna Kea, just short of 14,000 feet.

• Driving a Tesla Model S P85+. Best AND Worst experience I have ever had! It far surpassed any driving experience I could ever dream of.... and I know I could never afford to have one for myself:(After that beauty, driving any other car feels like swimming in warm porridge.

• Actually last month I rented a car for the weekend for \$13/day and was able to connect with my old friend, visit expo and do shopping...this month while I was in New York, I rented a Citibike in the downtown of NY, which is an excellent way of getting around in a grid lock traffic in NY.

• I was looking to buy a new car, the sales person insisted in going with me for the test drive and while I was trying to hear how the transmission was shifting and the engine was reving, the sales person wouldn't stop telling me places where I could put my purse.

• Rented a car in Auckland. Drove it about 7 blocks when it died. Completely ran out to fuel (was rented to us empty). We had to abandon it at the side of the road and call the rental company to come pick up.

• Best: Ford Mustang GT. Worst: Raining during my test drive with Ford Mustang GT

• Best experience was definitely the Enterprise Truck we rented this year. We picked up the GMC 2500 SLE (Crew Cab, Long-Box) in Surrey and it was basically brand new, with only about 100km on it. We brought it to BCIT, loaded it up FULL of tools, and our Baja SAE vehicle of course. We then drove it across the continent with 5 guys in 3 days, putting over 13,000 km on the odometer. It was flawless.

• In Hawaii, the car rental place ran out of PT Cruisers... all they had left was a red Mustang convertible. It was great.

• Car2go smart car. The smart cars are very odd to drive

• My worst test drive experience was on roger rabbit's cartoon spin. Proved to be a terrible driver at a young age, confident that my abilities have improved since.

• Our family had rented a camry in Maui, and just simply going over a speed bump caused the wheel splash guard to rip off and caused a nightmare for us.

- When my parents taught my sister to drive in one, I got out of the car.
- Dollar car rental in Orlando Florida, we rented 2 Chevy Suburbans and instead we got 2 Mazda 5's.
- Renting Toyota land cruiser in Uganda and taking it on a wild life safari
- Free upgrade to an audi in Tennessee, driving through the great smokey mountains in the fall
- Best I've had was in a Lincoln Navigator just because I was on eye height with some garbage trucks.

WELCOME NEW MEMBERS

Let's welcome the following new members to the SAE BC Section for the 2016/17 season:

Brady Planden Shadi Radwan Ross Garlick Mankern S. Johal Dean Tamboline Kim Dotto Tammy (Ziran) Yu Douglas H. Smith Benjamin D. Crook-Hanna George A. Skinner Glenn Jones Paul Huynh Peter Xing



The BC Section of SAE International is now entering its 61st year, since being officially designated as the SAE British Columbia Group on June 12, 1946. The Section has about 250 regular members with additional student chapter members at UBC, UVic, SFU and BCIT.

The majority of our Members live and work in the Lower Mainland, and represent a wide spectrum of technical interests. We have a regular program of local events, mostly centered in the Vancouver area, although we have had meetings elsewhere in BC on occasion.

PROFESSIONAL DEVELOPMENT SEMINARS

SAE BC has the potential to host professional development seminars locally through SAE International. We are gaging interest in a variety of topics. Please have a look at the link below to see which courses are being considered: <u>https://www.surveymonkey.com/s/XX5NSJ2</u>

VISION STATEMENT

SAE BC will be the active resource to the professional and student community for advancing the level of mobility engineering in the province of British Columbia.

MISSION STATEMENT

To enrich the professional life of the membership by:

- 1. Providing recognized leadership for mobility in British Columbia.
- 2. Creating opportunities for technical meetings, tours, events and continuing professional career development.
- 3. Supporting young membership through mentorship and funding of student activities.
- 4. Communicating through the newsletter, website and timely responses to members.
- 5. Striving for membership satisfaction at every opportunity.