Volume 2017-2018 Edition 6

**April 2018** 



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#### Contact Us: On the web:

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E-mail us at:

info@saebritishcolumbia.org

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# **UPCOMING EVENT:**'Tesla Service Centre Tour'









WHEN: April 23rd, 2017, 6:00 PM - 8:30 PM

WHERE: Tesla Vancouver Service Centre – Map Link

1636 West 4th, Vancouver, BC, V6J 1L9

**WHAT:** Sean Thompson, Tesla's Service Centre Manager will deliver a presentation on Tesla's electric vehicle technology and high-level strategy, to be followed by a tour of Vancouver's Service Centre. Snacks

and light refreshments will be provided. Attendance is limited to 30 participants, so please register using the weblink below.

**RSVP:** RSVP using this link: http://register.saebritishcolumbia.org/

And email: <a href="mailto:info@saebritishcolumbia.org">info@saebritishcolumbia.org</a> for more information.

COST: Free for student members, \$5 for SAE professional members, \$5 for

student non-members, \$10 for non members



# ANOTHER UPCOMING EVENT: 'Tour of ARKTOS – Large Amphibious Vehicles Built Here in BC'





**WHEN:** May 7th, 2017, 6:00 PM – 8:30 PM

WHERE: 12634 82<sup>ND</sup> Ave, Surrey, BC, V3W 3G1, map link. Lots of free parking on site.

**WHAT:** ARKTOS Developments Ltd., is a Canadian company located in Surrey that is the maker of the ARKTOS Craft. These are large amphibious vehicles, used in arctic and other

extreme environments, for a variety of applications, including rescue operations.

The vehicle consists of two hulls, connected in a way that gives the vehicle unique capabilities. ARKTOS is currently building an Evacuation Craft for a customer, which will be completed this summer - we have the opportunity to see this Craft in its advanced stages of integration.

If you are interested in large composite structures, amphibious mobility, tracked vehicles, and exciting applications, then this tour is for you!

Food and drinks will be available at the event, as well as coffee and tea.

RSVP: RSVP using this link: https://goo.gl/forms/3a8Tn96aexqD2k4g1

And email: info@saebritishcolumbia.org for more information.

COST: Free for student members, \$5 for SAE professional members, \$5 for student non-

members, \$10 for non members



# SUMMARY OF LAST EVENT: 'Tour of CMBC's Surrey Transit Centre'

Our last tour was a highly informative tour of Coast Mountain Bus Company's Surrey Transit Centre (STC). The first part of the tour was at Transit Communications, led by Jas Grewal. There are approximately 1500 revenue vehicles in Coast Mountain's fleet, as well as over 200 support vehicles and 4 SeaBuses. The target replacement cycle for a bus is 17 years. There are 900,000 passenger daily boardings. TComm fields around 800 radio calls daily from operators, as well as many other phone calls from internal and external stakeholders. In 2017, TransLink saw a 5.7% increase in ridership across its system.

Simon Upshon presented on the maintenance facility. They've just completed an 18-month retrofit of STC to accommodate compressed natural gas (CNG) fueling for the soon to be arriving CNG buses. At STC, there are 16 bays, including maintenance bays, a tire shop, paint shop, and body shop. Interestingly, tires are leased and are replaced at 5/32" tread. During Winter month all tires less than 11/32" tread depth are temporally replaced with new tires until warmer weather returns. Every night, Buses returning from service are topped up with fuel and washed. STC is one of 6 transit centres around Metro Vancouver. All the trolley buses are based in Vancouver Transit Centre. Trolleys average the slowest speeds due to their routes (approximately 17 km/h). The trolley electric bus overhead system operates on 600 VDC. Recently, two double decker buses were operated as a trial and were based out of Richmond Transit Centre.

James Andrews presented the last part of the tour. CMBC completed approximately 99M service km's in 2017. The Maintenance Division has around 1200 employees with an annual budget (including parts, fuel, insurance) of approximately \$250M. Commercial Vehicle Safety Enforcement (CVSE) recently approved an adjustment to CMBC's preventative maintenance schedule from 6,000 km to 8,000 km, which is a big initiative currently being implemented. James reckons battery electric buses are the way of the future and Coast Mountain is investigating battery-electric buses and charging systems options (on-route or depot charging).











# **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 do you think are the most serviced components of a Tesla car?"

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

#### Last month's question:

"How often do you use public transit? What would cause you ride it more or less often?

#### **Selected responses:**

- I take the Skytrain occasionally, when drinking. Unlikely to be on a bus because it's just more of an unnecessary friction point
- Rarely (1x/month); more frequent bus service and the ability to see bus routes at each bus stop (a visual map would act as a cue to stop, check out the route, and hop on the bus if convenient); for skytrain, we need more routes
- 2-3 times/mo. More often dependent on frequency and trip duration
- Very rarely
- Not typically. Convenience is the main issue
- Everyday. Upass
- 3-4 times/month. If the bus stop was nearer to my home I'd ride it more often. I'd use it less often if the frequency were to be reduced



# SAE BC AWARDED 'GOLD SECTION' STANDING

Congratulations to SAE BC for being recognized as a Gold Section this year by SAE International for engagement with young professionals, support for educational initiatives, and use of the member connection website. We were one of 12 sections worldwide to receive this designation.

We would like to thank and congratulate Elise Woolliams for her leadership during this time!

# 2017-18 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!

A reminder to Professional Engineering members that attending SAE events contributes to their Continued Professional Development (CPD) as outlined by Engineers and Geoscientists of BC.

2018 April 23 Tesla Tour
2018 April 30 Board Meeting
2018 May 7 Arktos Tour

2018 May 14 Year End Event – TBD

## WELCOME NEW MEMBERS

Let's welcome the following new members to the SAE BC Section for the 2017/18 season:

Kody Taylor Roei Ornai Eric Sikes Jonathan Leskewich Kris Ramachandra David Johnson



The BC Section of SAE International is now entering its 72<sup>nd</sup> 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.

### **KEEP RECEIVING OUR NEWSLETTER**

If you are an SAE member, but did not receive this e-mail directly, you may have opted out of SAE e-mails. Please log into SAE.org, and under mySAE, Account Profile, Communication Preferences, please ensure the following item is checked:

I would like to receive:	
All SAE Product Announcement Emails *	All SAE Product Announcement Direct Mail Communications
All SAE Telephone Communications	All SAE Mobile Communications
All SAE SMS/Text Communications	All Third Party Email Communications
All Third Party Direct Mail     Communications	

# 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.