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## MESSAGE FROM THE CHAIR

The Richmond/Delta Branch of Engineers and Geoscientists BC serves over 1,800 registrants in Richmond/Delta. The Branch Executive Members' include the elected representatives of the key community stakeholders and organization volunteers of Engineers and Geoscientists BC, all of whom are working together towards common branch goals.

The Branch Executive meetings are regularly held on the evening of every second Tuesday of the month (except July and August). In consideration of the COVID-19 pandemic, however, branch meetings have been set to virtual format.

The branch has always been looking for volunteers who could bring new ideas to the activities of the branch. Should you have any questions about the meetings and how you can share your ideas, please email: [chair.rd@volunteer.egbc.ca](mailto:chair.rd@volunteer.egbc.ca). Please also visit our Branch web page (<https://www.egbc.ca/About/Our-Team/Branches/Richmond-Delta-Branch>) for the latest branch updates.

We will continue to work along with the organization's initiatives and programs to help the growth of our community. We are glad to prepare this Newsletter to describe our branch activities in 2020.

Nima Moazen, P.Eng.

Chair, Richmond/Delta Branch

## VICE PRESIDENT'S DINNER AND BRANCH ANNUAL GENERAL MEETING

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The Richmond/Delta Branch of Engineers and Geoscientists BC held their Annual General Meeting (AGM) on January 29th at the Sandman Hotel, Vancouver Airport.

The event commenced with networking amongst the registrants and the visitors present, followed by a dinner. There was also a presentation highlighting the events hosted by the Branch 2019 with mention of the success of NEGM 2019, 3D Modelling and the Diversity in Engineering events. Following the highlight, there was an introduction of the new Executive Committee and a handover from Past Chair, Ron McOuat, P.Eng. to the new Branch Chair, Nima Moazen, P.Eng.



Following the AGM presentation, offering his congratulations to the Branch's Executives for their continued performance, EGBC Vice President, Larry Spence, P.Eng. delved into an update of the Professional Governance

Act. The presentation touched on topics such as when the Act will be implemented, regulations of engineering and geoscience firms, competency and conflict declaration, which sparked a lively question and answer discussion.



## CAPSTONE PROJECT SEMINAR

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On February 7, 2020, the Richmond/Delta Branch of EGBC organized a presentation of the Capstone Design Project course by Dr. Paul Lusina, P.Eng. at the Richmond Cultural Centre. Dr. Lusina is a lecturer in the Electrical and Computer Engineering department and co-founder of the 4th year Capstone Design project at the University of British Columbia (UBC). He has a strong belief that industry and community partnerships are the best medium for incorporating best practices and methods that would prepare this and future generation of engineers for the constantly changing technological landscape.

The fourth year Capstone Design course pairs teams of students with industry or community clients to solve significant

technical problems. The students will draw on the skills they have attained during their studies to provide real-world,

## POPSICLE STICK BRIDGE BUILDING COMPETITION

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The Branch's NEGM 2020 event was organized at the Richmond Public Library, Brighthouse Branch on March 7th, 2020. As previous years, the event was a very successful and well attended. In addition to the popsicle stick bridge competition, we had booths from the following university engineering student teams: UBC Steel Bridge Team, UBC Rocket Tam, UBC Mars Colony Team, and UBC Faculty of Applied Science. The booths engaged hundreds of students and adults, and gave information from the work of engineering, sciences as well as municipalities' works.



We are extending a big thank you to all our Branch Executives and volunteers as well as the amazing library staff for hosting the NEGM at the library. This even heavily relies on the volunteers and would not be possible without them.

technical and non-technical solutions to challenges they are likely to experience in the workforce.



There were more than 60 bridges tested on the infamous bridge buster. All bridges were allowed a maximum of 100 popsicle sticks and white school glue. The highest record was 971lb in the open category. The all-time record was in NEGM 2018 with 1206 lb.

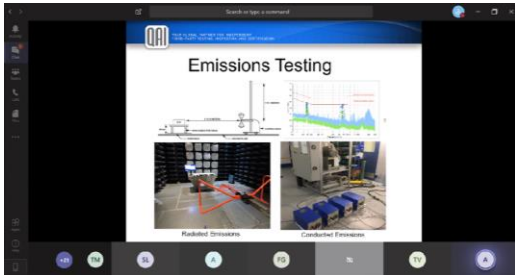
## QAI LAB TOUR

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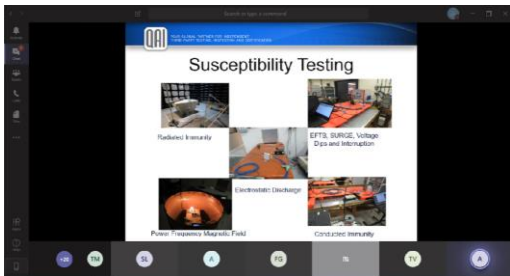
The Richmond/Delta Branch of Engineers & Geoscientists of BC held a virtual tour on May 19, 2020, specifically for professionals responsible for the certification of electrical products for the domestic and global markets. QAI did a test run beforehand to ensure everything worked sufficiently.



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The presentation was done in two parts. In the first 30 minute session, the presenter took his laptop explaining various things, including how critical it is to implement and have detailed testing and certification plans in the early stage of the design cycle. For example, light industrial products require EMC and safety certification from an OSHA-accredited lab in the US . This was then followed by a Question and Answer session.





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## 3D MODELLING WORKSHOP

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On November 4 and December 9, 2020, two virtual sessions of the Introduction to 3D Modeling with Autodesk Fusion 360 were presented by Fardin Barekat, EIT, and hosted by the Richmond Delta Branch. The presentation was about the potential use of Fusion 360 software for engineers. Each event was 2 hours long. The first hour was mainly a show-and-tell of the software and possibilities of design and development, and the second hour was mainly geared towards Q&A session. The Branch is planning to host more of these types of events since they are very popular and attract a lot of people.

## LIFE AFTER THE NATO AWACS E-3A

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On November 18, 2020, the Richmond/Delta Branch hosted a webinar event about an evolutionary roadmap for the replacement of AWACS.

NATO operates a fleet of Boeing E-3A Airborne Warning & Control System (AWACS). The AWACS is planned to retire in 2035. The presenter Jerry Lim presented MDA's vision to provide an evolutionary roadmap from the ability to fill the capability gap that the NATO E3 leaves to a future NATO Surveillance and Control capability. He identified and established a path to the emerging

threats as well as opportunities to connect and integrate with planned and current capabilities.

Jerry Lim has been a Principal Engineer at MDA for the past 44 years. He has been creating and building complex system for commercial, government, and military customers for Space, Airborne, Naval, and Ground. He is a member of Engineers and Geoscientists BC, Fellow Engineer of Canada, IEEE Life Senior Member, ACM Senior Member, and Member of INCOSE.

## UBC HATCH

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On December 1, 2020, the Richmond/Delta Branch hosted a virtual event of the UBC Hatch and Entrepreneurship program. Francis Steiner and Fatima Damji did a presentation on the various stages of the UBC HATCH Accelerator program. The program encourages and guides budding entrepreneurs through concept and product development, company building to get start-ups to an investment ready state.

The event was found fun and engaging by the attendees. Examples of successful companies that passed through the program were given and the presenters even heard an 'elevator pitch' from a current UBC student and was able to give some excellent feedback.