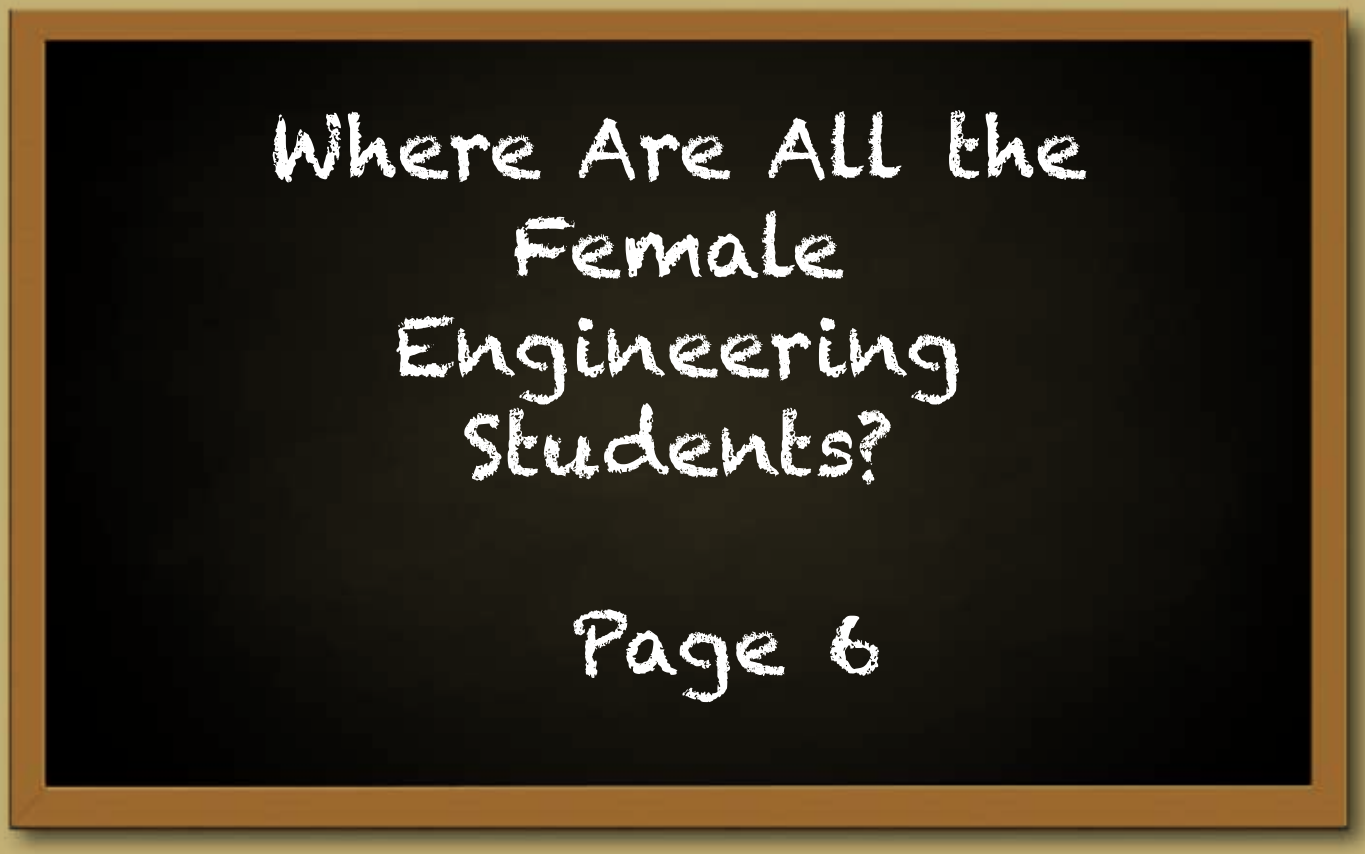
APEY

Association of Professional Engineers of Yukon



APEY Newletter

Fall 2010

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Goran Ostojic, P. Eng.
Claude Poirier, P. Eng.
Kendall Kirk Seaton, P. Eng.
Allan Robert Arbuckle, P. Eng.
Joan Marguerite Lewis, P. Eng.
Frank Kwai Kong Szeto, P. Eng.
Christopher Kai-Fai Cheng, P. Eng.
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Ahmed Reda Aiouch, P. Eng.
Dieter Diedericks, P. Eng.
Paul Kenneth Gill, P. Eng.
Kevin Souza, P. Eng.
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Josee Perron, P. Eng.
Michael Tilbrook, P. Eng.
Alex Ashok, P. Eng.
Kevin Edward Wong, P. Eng.
Leemark Aaron DeLeon, P. Eng.
Guyaume Courcelles, P. Eng.
Michael Douglas Streight Blackman, P. Eng.
Alireza Farahbakhsh, P. Eng.
Scott Arthur Smith, P. Eng.
Sean Piper, P. Eng.
Stephen Anderson Cumbie, P. Eng.
John McNea Baird, P. Eng.
Andrew Richard Sorensen, P. Eng.
Sanghun Lee, P. Eng.
Ronald George Akehurst, P. Eng.
Lewis Andrew Macrae, P. Eng.
Ian H. Harder, P. Eng.
Randal Bauer Smith, P. Eng.
Serena Steinman-Russell, P. Eng.
John Cheung Sang Chin, P. Eng.
Marinus Folmer Lensink, P. Eng.
Raymond Paul Anderson, P. Eng.
Jack Bishara, P. Eng.
Martin Fleury, P. Eng.
Philippe Gingras, P. Eng.
Mohammed Atiqur Rahman, P. Eng.
Matthew Franklin Younger, P. Eng.
Henry Warren Newcomen, P. Eng.
Li Yong (Andrew) Han, P. Eng.
Albert Alexander Toms, P. Eng.
Gerard Sass, P. Eng.
Ning (Jenny) Li, P. Eng.
Fan Jiang, P. Eng.
R. Eric Willms, P. Eng.
George Johannes De Ridder, P. Eng.
Maurice James Lawson, P. Eng.
Michael Garrett Baker, P. Eng.
Hugh James Tuttle, P. Eng.
Rodney William Ambrosie, P. Eng.
Seyed Mohammed (Kam), P. Eng.
Soltani Arabshahi, P. Eng.
Abdallah E. Mustafa, P. Eng.
Audie Laurence Hamlin MacDonnell, P. Eng.
Joel Andrew McAllister, P. Eng.
Rodney Robert Magee, P. Eng.
Gregory Leo Riley, P. Eng.
Marc-Andre Lavigne, P. Eng.

New EIT's

Marko Anto Marjanovic
Gordon Charles Schubert
Arthur Alexander Cooke
Catherine Mary MacDonald
Amy Elizabeth Gill
Duncan A. Nixon
Robyn Kersti Waher

New Permits to Practice

J.R. MacKenzie, P. Eng.
Red Associates Engineering Ltd.
SAP Engineering Ltd.
Robertson Building Systems Ltd.
BAH Enterprises Inc.
BBA Inc.
Cobalt Engineering
Harder Associates Engineering Consulting Inc.
GS Sayers Engineering Ltd.
CWA Engineers Inc.
Acrow Ltd.
Sunward Consolidated Group
R.D. Solz and Associates, Inc.
Cogeneration and Energy Management Engineering Inc.
Hugh Tuttle
LVM Inc.
NORAM Engineering and Constructors Ltd.
Integral Engineering Inc.
Protection Engineering
Greg Riley, Structural Engineering Consultant

Members Resigned in Good Standing

Geoffrey Alan Evans
Mitch Moroziuk
Kai Hing Tsoi
Donald Dean Loraas
Yannick Roy
William Hatton
Mark Bettney
Matthias Schueller
Prabhjeet Singh
John David Johnson
Braham P. Singh
Donna Elena Reimchen
Alex Yee-Kong Fung
John Owen Haystead Nunn
Faye Ellen Hicks
Vinod K. Bhardwaj
Alexander K. Love
Andrea Louise Morgan
John Stecyk
Juri Borsky
Robert G. Armstrong
Lawrence Donald Ming
David James Vadocz
Max Bischof
David Francis Vinish
Donald A. Nelson
Donald Bruce McLeod
Michael William Saunders
Norman William Kelly

President's Message Fall 2010

I am very pleased to once again have a newsletter to share with our members. For those of you with long memories you might recall our last Association Newsletter was issued in Fall 2005. The last issue coincided with the departure of our former Executive Director who had some expertise in desktop publishing and was the major force in putting together the newsletter over his tenure as our Executive Director.

Since that time it has proven difficult to provide a newsletter on a purely voluntary basis. Being heavily reliant upon volunteers is an overarching issue that APEY must consider in regards to many of our activities or in some cases lack of activities.

As someone who has been on Council for the last eight years (four times as President) I have come to the conclusion that our reliance on volunteers to provide core services is neither sustainable nor desirable. This is not to say we lack good volunteers, in fact I believe that many of our local members are outstanding volunteers and that they are highly active in many activities in Whitehorse. Unfortunately we simply lack numbers and we have a great deal of competition for the services of our small volunteer pool.

For APEY to better fulfill its mandate in the governance of the profession in Yukon I believe we need to look at our options to move towards the greater use of staff and other resources. As part of this progress Council has elected to complete a formal strategic planning process this fall. We shortly expect to be selecting a local strategic planning consultant to assist us in getting this done.

At its heart the process is going to involve bench marking the activities of our Association with similar sized associations across Canada to see how we perform and to then come to some conclusion whether we are satisfied with our current performance. For example are we offering an appropriate level of continuing professional development opportunities, do we communicate with our membership at a reasonable level, and is our public outreach appropriate or lacking? By answering these types of questions we can help decide on where we need to take our Association so that we comfortably meet our mandate. Certainly I expect one potential outcome is to determine whether we are adequately resourced in terms of staffing.

The strategic planning process is going to rely heavily upon the input of Council and Officers - but it will also need your input if we are to develop a broadly supported and appropriately scaled plan for our Association. To that end we will be seeking the input of our local members using both a survey and a facilitated meeting. Once our consultant is on board we will be provide further information regarding how you can provide input into

the future of APEY.

One thing that I would invite you to do in advance of this process is to have a look at the activities that some of our neighbouring jurisdictions are engaged in to develop a sense of where we sit in regards to activity levels. And when I use the word activities please understand this does not just mean outreach – it also encompasses vital regulatory functions such as enforcement, discipline, and the development of professional standards.

All going well it is the hope of Council to have the results of the planning process available for the membership to review and approve at the March 2011 Annual General Meeting. As President, I truly hope that this strategic planning process will provide us a road map for the future of APEY. I also hope that it will result in being able to provide a newsletter far more frequently than once every five years!

Cord Hamilton, P.Eng.

President

BUILDING ON ENGINEERING KNOWLEDGE

ENGINEERS CANADA NATIONAL SCHOLARSHIPS PROGRAM

Engineers Canada invites professional engineers to enter the 2011 National Scholarship Program competition.

Deadline : March 1, 2011

Manulife Financial Scholarships

Field: **Engineering**

Value: $12,500

Criteria: Candidates must be accepted or registered in a faculty of engineering, beginning their studies no later than September 2011.

TD Insurance Meloche Monnex Scholarships

Field: **A field other than engineering**. The field of study chosen should favour the acquisition of knowledge pertinent to enhancing the performance of the candidate in the engineering profession.

Value: $7,500

Criteria: Candidates must be accepted or registered in a faculty other than engineering, beginning their studies no later than September 2011.

TD Insurance Meloche Monnex Léopold Nadeau Scholarship

Field: **Public Policy Development.** The field of study can be engineering or another subject area.

Value: $10,000

Criteria: Candidates must be accepted or registered at the time the scholarship is awarded (in the fall), in a master's or doctoral program that will greatly enhance their engineering expertise, abilities and potential to influence the development of public policy.

Refer to the application form for the complete list of eligibility requirements.

Application forms are available at:
www.engineerscanada.ca/e/pr_awards_2_1.cfm

To contact the National Scholarship Program at Engineers Canada email: awards@engineerscanada.ca

engineerscanada ingénieurscanada

Engineers Canada is the business name of the Canadian Council of Professional Engineers.

*The term ENGINEERING is an offical mark held by the Canadian Council of Professional Engineers.

WHY AREN'T MORE GIRLS GOING INTO ENGINEERING, SCIENCE AND TECHNOLOGY?

Elizabeth Croft, a mechanical engineering professor at the University of British Columbia, has some ideas why not and what to do about it.

Croft has been named the Natural Sciences and Engineering Research Council (NSERC) Chair for Women in Science and Engineering for the British Columbia and Yukon Region. The chair's primary focus, a five-year term, is to increase the participation of women in science and engineering and to provide role models for women active in, and considering, careers in these fields.

Currently at UBC, women make up more than half of the undergraduate population. But only 18 per cent of

engineering undergraduates are women. Women are also underrepresented in computer science, physics and mathematics. Within engineering and high-technology careers, attrition rates of females are estimated as high as 40 per cent.

However, in other parts of the world such as Asia, Eastern Europe and South America, women represent about up to 50 per cent of the student body in these fields. To start, says Croft, North American institutions need to address and change girls' perceptions that it's not "normal or cool" to study engineering or science.

Croft also acknowledges the differences in how boys and girls approach career choices. For example, girls are more drawn to the helping professions. To many young women, engineering doesn't obviously fit into that category, observes Croft, despite the fact that "engineers envision, design and build the medical, environmental and consumer technology that helps people live healthier, greener and more connected lives."

That's exactly what Croft has been able to do in her career. Here's a link to see an August Popular Science magazine story about the Rise of The Helpful Machines, Croft's "RISER" rehab robot for stroke victims: http://www.popsci.com/technology/gallery/2010-07/gallery-rise-helpful-machines. Scroll to #7 of the 10 images in the gallery.

At UBC, Croft is including a "community-service learning" module in the mechanical engineering curriculum so students gain hands-on experience how their skills and knowledge can benefit others.

This fall, close to 130 second-year students will be able to earn credits while working on community and industry projects.

To support workplace change, Croft is partnering with industry and existing networks for women in science and technology. She aims to help the traditional technical workplace find ways to accommodate the nonlinear trajectory for employees who may need flexibility to raise families, care for aging parents or nurture personal growth.

"This can end up benefitting all workers in these fields," says Croft.

News release provided by UBC Faculty of Applied Science.

Continuing Professional Development Update

Below is a brief update on the status of APEY's Continuing Professional Development (CPD) program.

November: APEY was fortunate to have Engineers Canada & Natural Resources Canada (NRCan) provide us with a valuable and timely workshop; an introduction to the Public Infrastructure Engineering Vulnerability Committee (PIEVC) for climate change vulnerability assessment. The PIEVC is a national committee co-founded by Engineers Canada and NRCan, and involves all three levels of government as well as non-government organizations.

The committee has developed a procedure for assessing and documenting the risk posed to public infrastructure by changing climate. The scope of the PIEVC involves evaluating four categories of public infrastructure for its vulnerability to climate change, these include Buildings, Roads & Associated Structures, Storm Water and Waste Water Systems and Water Resources.

This PIEVC workshop held November 1st was a rare opportunity for local APEY members to participate in a nationally-presented workshop with a convenient venue in our own back yard.

Adapting infrastructure to a changing climate | Adapter les infrastructures à l'évolution des conditions climatiques

PIEVC | CVIIP

PUBLIC INFRASTRUCTURE ENGINEERING VULNERABILITY COMMITTEE | LE COMITÉ SUR LA VULNÉRABILITÉ DE L'INGÉNIERIE DES INFRASTRUCTURES PUBLIQUES

Note that we'd like to thank the Northern Climate Exchange and Yukon College for providing us with a venue for this event.

More information on the PIEVC can be found at: www.pievc.ca

Also, below this is a link to a PIEVC video that provides more information on the committee and the workshops: http://www.engineerscanada.ca/files/pievc_seminar.wmv

New Year: Another event is being planned, tentatively taking place at the end of January. One of APEY's long-time members, Tim Koepke, has offered to present a half-day seminar on a topic related to implementing engineering projects on First Nations lands. It is expected that the timing of the event will allow for including the results of an important case being heard in the Supreme Court involving the Little Salmon/Carmacks First Nation. More details on the subject matter and timing of the event will be made available to APEY members in the near future.

Annual General Meeting: Council and the CPD Committee are planning for a CPD event to coincide with the next AGM. A topic has not yet been selected, however several are being considered including time management, technical writing/editing, project management and professional liability and responsibility.

The CPD committee and council wish to create CPD offerings that reflect what the membership values. As such, suggestions from the membership for future CPD ideas are always welcomed.

CPD Reporting: As a reminder to all APEY members, our CPD program is currently voluntary however there is a $50 penalty if you do not report your CPD hours. The APEY CPD program uses the APEGGA model and credits all CPD hours that are submitted for other Professional Engineering Associations across Canada. The APEY executive strongly encourages all members to participate in the CPD program.

CPD Committee Members: The current CPD committee members are Ryan Martin, Paul Murchison and Rod Savoie (chair). Suggestions for any topics related to the CPD program can be sent to any of the committee members or directly to Paul.Murchison@gov.yk.ca or rods@fsc.ca

The Canadian Engineering Memorial Foundation 20 Years of Investing in the Future "Dream To Be an Engineer"

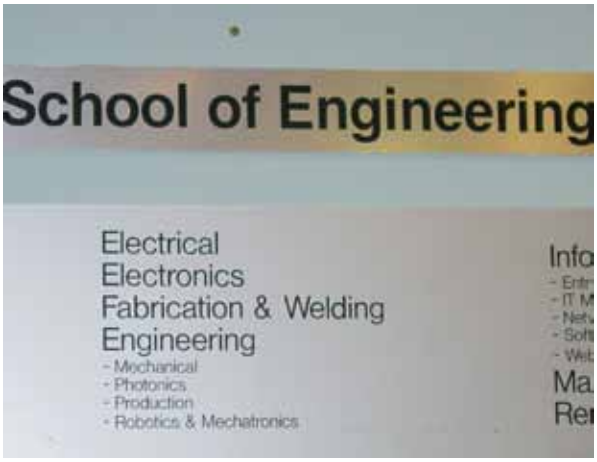
Promotion, encouragement, scholarship, and education – these are the basic tenets that drive the goals and achievements of the **Canadian Engineering Memorial Foundation.** It is through these principals that the Foundation has been providing inspiration and opportunities for young people, especially women, to choose and pursue exciting careers in engineering.

The Foundation is committed to creating a world where engineering meets the needs and challenges of Canadians by engaging the skills and talents of both men and women alike. The Foundation is dedicated to attracting more women to the engineering profession so they may contribute in a truly inclusive manner. In so doing, they also honour the memory of the 14 women from École Polytechnique whose contributions to Canada ended on December 6, 1989.

Through the generosity of its donors and supporters, the Foundation is able to promote engineering as a career option to young women helping many of Canada's most talented students pursue an education in engineering.

Each year up to five scholarships are awarded by the Foundation to women in their first, second or third year of an accredited engineering undergraduate degree program. These $5,000 scholarships are available to students from Canada's five regions. Scholarship recipients are leaders in their community, involved in volunteer work and services and participate in extra-curricular activities. Young women selected to receive these scholarships serve as role models to others and must be willing to promote engineering through visits to local high-schools and in their communities. High marks and academic achievement are not criteria.

For post graduate studies the Foundation offers a scholarship in the amount of $15,000 – this



scholarship is named after one of the Foundation's original founders, **Claudette McKay-Lassonde**, who passed away in June 2000. The scholarship recognizes a candidate who has acted as a leader in her community, who has dedicated her time and energy to promoting engineering as a career to young people, who is involved in research and teaching and who is enrolled full-time in a graduate engineering program at the PhD level.

In early 2006 Vale Inco became the first Canadian corporation to partner with the Foundation to offer named scholarships. **The Vale Inco Undergraduate Scholarship Program** consists of three $10,000 scholarships along with one $10,000 Vale Inco Master's Engineering Scholarship. Recipients may be provided with a summer job opportunity with Vale Inco.

Later that year, AMEC partnered with CEMF to fund a new $10,000 AMEC Master's Scholarship in Engineering and a $5,000 undergraduate AMEC Aboriginal Scholarship in Engineering. The master's scholarship may also come with a summer job opportunity at one of the many AMEC locations across Canada.

Most recently, the Foundation created the CEMF 20th Anniversary National Scholarship for Women in Engineering. In recognition of 20 years of providing engineering scholarships to Canadian women to study engineering who are leaders in their communities, a $10,000 undergraduate engineering scholarship is being offered in 2010. The winner will act as a mentor to other young women to encourage them to pursue a career in engineering. Like all CEMF scholarships, this unique award is not based on academic achievement. Applicants must be female engineering students at the undergraduate level enrolled full-time in an accredited university engineering program at a Canadian university.

Most CEMF scholarship winners are required to make at least one presentation to a pre-university audience to encourage others to consider engineering as a career choice. All scholarships are awarded based on leadership, extracurricular activities and the applicant's dedication to encouraging more women to become engineers.

For more information on the Foundation, its scholarships and programs, to find out how your company can partner with CEMF or how you can contribute as an individual, please visit the website at www.cemf.ca or contact the Foundation directly.

Canadian Engineering Memorial Foundation

Tel: 1-866-883-2363

E-mail: info@cemf.ca

New Anniversary Scholarship Added to Already Extensive 2010 Program

(Renfrew, Ontario): Another Canadian woman will have her dream of becoming an engineer supported by a prestigious scholarship thanks to the Canadian Engineering Memorial Foundation.

In recognition of 20 years of providing engineering scholarships to Canadian women studying engineering, a $10,000 undergraduate engineering scholarship is being offered in 2010. The winner will serve as a mentor to other young women, encouraging them to also pursue careers in engineering. Like all CEMF scholarships, this unique award is not based on academic achievement but rather winners are selected based on leadership qualities, involvement in volunteer work and services, and participation in extracurricular activities.

This new scholarship brings the total to 13 scholarships offered by the Foundation for women in engineering at the undergraduate, master's and PhD levels for this year.

Undergraduates are invited to apply for one of five $5,000 CEMF Undergraduate Engineering Scholarships (one scholarship given in each region of Canada; Atlantic, Quebec, Ontario, Prairies and British Columbia);one of three $10,000 Vale Inco Undergraduate Engineering Scholarships: the $5,000 AMEC Aboriginal Undergraduate Engineering Scholarship offered to a Canadian Aboriginal woman studying engineering in an accredited program; or the new $10,000 CEMF 20th Anniversary National Scholarship for Women in Engineering.

At the master's level, Vale Inco has partnered once again with the Foundation to offer a $10,000 Vale Inco Master's Engineering Scholarship. Likewise, AMEC remains a strong CEMF partner and is also providing a $10,000 AMEC Master's Engineering Scholarship – both of these scholarships are open to women studying in any field of engineering and may provide a summer job opportunity.

The prestigious $15,000 Claudette MacKay-Lassonde Scholarship is offered to a woman who has acted as a leader in her community, who has dedicated her time and energy to promoting engineering as a career to young people, who is involved in research and teaching and who is enrolled full-time in a graduate engineering program at the PhD level.

Scholarship informational packages and posters will be sent to all universities, Deans, engineering organizations and clubs, WISE organizations, provincial associations and other stakeholders. Please contact CEMF if you wish to receive a package.

All applications and criteria are available now online at www.cemf.ca. Deadline for application is January 14, 2011.

Engineers Canada Directors Report Fall 2010

As I have not previously had the opportunity to provide a written report to our local members I would like to provide this initial report as a primer on Engineers Canada itself and as a high level report on recent activities of Engineers Canada.

In the future I hope to post more specific reports regarding the activities of Engineers Canada.

Engineers Canada – A Primer

Engineers Canada is the operating name of the Canadian Council of Professional Engineers (CCPE). Engineers Canada is the national affiliation group of all the Professional Engineering Associations across Canada. It was formed nearly 75 years ago to allow for the cooperation of the Associations at a national level. As a Constituent Association of Engineers Canada, APEY has the privilege of a seat on the Board of Engineers Canada – even though we represent only a fraction of a percent of the national membership.

Engineers Canada exists solely to serve the interests of the Constituent Associations by delivering services and programs that are most efficiently managed on a national level. The primary examples of Engineers Canada's activities are the Canadian Engineering Accreditation Board and the Canadian Engineering Qualification Board. The Accreditation Board is responsible for approving the curriculum of Canada's engineering schools so that all the Associations can be confident in the quality of education received by Canada's engineering graduates.

The Qualifications Board has the role of facilitating the development of national guidelines for the profession – such as the requirements for Canadian engineering experience to be qualified as a Professional Engineer. In the new environment created by the Agreement on Internal Trade (AIT), the role of the Qualifications Board is expected to become more and more significant in the future. As a result of the AIT there is a great expectation that Qualifications Board will eventually develop national standards instead of guidelines for things such mandatory professional development.

Engineers Canada is also the coordinator of many of the affinity programs offered provincially by insurance providers. Engineers Canada negotiates program rates discounted from individual offerings to provide good value to Canada's professional engineering community. As a result of Engineers Canada's buying power, affinity program providers provide

substantial direct funding to Engineers Canada and Constituent Associations to help support other programming and offset direct member costs to support Engineers Canada.

Engineers Canada also has the role of representing Canada internationally through membership in many international engineering organizations. By being present on the international stage, Engineers Canada is able to monitor the quality of Canadian Engineering on the international stage and ensures that the Profession is keep abreast of developments outside of our borders.

Finally Engineers Canada has a mandate for "promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public". This advocacy role is in contrast to interpreted regulatory mandate of some associations and is perhaps the most difficult and contentious of Engineers Canada's potential activities.

Engineers Canada is located in Ottawa and includes a staff of about 40. Annually Engineers Canada has a budget in excess of $7,000,000. The organization is managed by a Chief Executive Officer who currently is Ms. Chantal Guay, ing. P.Eng. Ms. Guay is responsible for the operations of Engineers Canada and she reports to the Board of Directors.

The role of the Board of Directors

is to develop policy, and to monitor its implementation by Engineers Canada staff. The Board also has the role of being advisors to the Constituent Associations in looking to the future of the profession in Canada.

For more information regarding Engineers Canada please visit their website (http://www.engineers-canada.ca).

Current Activities and Issues

For ten of the last eleven years, Yukon's Board seat was ably occupied by Mr. Bob Lorimer, P.Eng., FEC. As of May 2009 I had the good fortune to replace Bob and to represent Yukon at the national table. Since my induction to the Board, Engineers Canada has been undergoing a significant restructuring of its governance process to better allow the national body to service the Constituent Associations.

This process of revitalizing the governance structure of Engineers Canada was undertaken to ensure that decisions of the Board are broadly supported both in terms of jurisdictions and Association member populations. This was necessary because (as with many Canadian confederations) there is an imbalance in regional populations and hence in funding flowing from regions. Making decisions with this imbalance has been difficult, time consuming, and ultimately uncertain.

As Yukon's Board member I have participated in this process and

have ensured that the balance between numbers and regions will not result in the marginalization of smaller Associations. This has been accomplished by ensuring that every Director at the table has one vote, that they sit down as equals, and provide value based on merit. To balance the population issue, the number of seats allocated to larger provinces has been selected to ensure that the voice of those larger populations is proportionally bought forward.

A voting protocol has also been developed for the Board to require super-majorities to approve significant items – such as strategic plans and annual budgets. As the Board reports directly to the Constituent Associations at an annual meeting of members, voting protocols for that meeting have been set to a double super-majority representing a super-majority both in terms of populations and jurisdictions.

As of Fall 2010 we are now entering the final phase of the process of restructuring the governance of Engineers Canada by looking at the issue of sustainable funding of Engineers Canada. Currently (all going well) it can take over three years to change the base funding that Engineers Canada receives. Engineers Canada is also currently funded in a substantial way by affinity partners. Both of these issues are considered to be problematic by some or many Board Members and Constituent Associations and the issue will hopefully be resolved in the coming months.

Other issues at the national table are to resolve what role Engineers Canada will have in regards to raising or maintaining the profile of the Profession in Canada. There is considerable debate as to how and who should be addressing this issue. Until a national consensus is reached it is difficult for national programming to be developed and delivered.

As your representative on the Board of Engineers Canada, I am currently on the Executive Committee of the Board, I am chair of the Women in Engineering Taskforce, and involved in several other taskforces and committees.

I look forward to continuing to represent Yukon at the Board and am happy to receive any comments you may have on issues of national interest to the Profession. Please feel free to contact me, if you have any questions or comments.

Cord Hamilton, P.Eng.
Yukon Director,
Board of Directors,
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