

Professional Engineer



The De-Dilbertizing of the Engineering Profession

By: P.C.H. Wong, EIT

The Professional Development Committee held a Breakfast Meeting on Wednesday, April 17, 1996. Hugh Goldie, P.Eng., a Partner with The Exchange Consulting Group, addressed the issue of the Dilbert stereotype. The cartoon strip, "Dilbert", portrays engineers as a stereotype which many engineers may not consider complimentary. Our society uses caricatures to stereotype people we don't understand, and the idiosyncrasies of engineers do not escape this trend. This struck a familiar chord with me since I work at a multidisciplinary firm where engineers work along with scientists.

On a more serious note, the speaker discussed the fact that engineers as a group do not receive the credit they deserve for all the great contributions they have made to society. He continued to talk about how to understand the differences between engineers and others (non-engineers) in the work-place. He used the Birkman Grid to illustrate different personality types. Understanding this grid can lead to better understanding and more effective communication (or relationships) among people (between engineers and non-engineers, in this case). The more we understand each other, the more we can adjust to become more effective. Ultimately, this contributes to more effective functioning in the work place, which improves the bottom line.

After the speaker answered questions from the audience, Doug Kramble (Chair of the Professional Development Committee) thanked Mr. Goldie for his thought-provoking presentation. Mr. Goldie, a process engineer at heart, added another element (the 'Human Element') to the

process-design problem, and gave us a system to approach the solution. An alternative title for this interesting presentation could have been "Improving Your Profit Margin by Solving the Human Element". But then again, Dilbert fans might not have shown up at the meeting! □



Hugh Goldie explains the "Dilbert" stereotype.

Improving Our Image

By: S.C. Alford, P.Eng.

I'm almost always impressed with the professionalism and competence of the engineers I meet. It makes me wonder why we as a group are burdened with so many negative stereotypes. You all have probably seen the Dilbert cartoons and the image of the engineer that it portrays. I've heard far too many disparaging remarks over the years about our profession: "engineers aren't creative", "engineers don't work well with people", "engineers can't write", "engineers can't see the big picture", "engineers can only deal with technical issues", etc. Most of the remarks are not

meant to offend, but hey, how can you not be offended by these kinds of statements? Besides, I just don't buy it.

So where do these stereotypes come from? I haven't seen any engineers walking around with pocket protectors and slide rules...I don't even know how to operate a slide rule! Regardless of the origin, I'd like to see our image improve.

We can go a long way toward changing our image by changing the way we see and present ourselves to others. We must see ourselves as competent professionals who not only apply tech-

nical principles, but who also have a wide range of skills and a broad perspective. Unfortunately, it can be easier, at times, for us to live within the stereotypes. It allows us to make statements like: "I'm an engineer, I can't deal with these non-technical issues"; "I'm just an engineer, don't ask me to be a communicator"; "I'm an engineer, I can't be expected to worry about proper spelling". Every time we make this kind of statement we send a message about how others should perceive us.

Engineering is an unusual profession. You study and work hard to learn a specific technical discipline. Often, when you reach the state of development that includes a comprehensive and in-depth understanding of the technical, you are

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THE MANITOBA Professional Engineer

August, 1996

Published by the Association of Professional Engineers of the Province of Manitoba
850A Pembina Highway
Winnipeg, Manitoba R3M 2M7
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Opinions expressed are not necessarily those held by the APEM or the Council of the APEM.



**WE HAVE LOST CONTACT.
MAY WE HAVE AN ADDRESS?**



A.W. Ptak

I. Sabau

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E.S.S. Lee	

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W.D. Bridges	L.W. Moore
J.B. Buhler	S.G. Nikel
R.J. Cantin	T. Renic
J.S. Carrie	K.B. Sarson
J.G. Church	K.B. Sawatzky
T.B. Dickson	K.A. Schmigel
B.O. Dijeh	K. Shah
C.B. Dirk	K.G. Snider
J.S. Dutchak	A.R. Subramaniam
V. Edwards	D.A.S. Switzer
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A.S. Kotula	R.B. Znidarec
E.A. Lemus	D.A. Zolinski
S.M. Majko	

ENGINEERS-IN-TRAINING ENROLLED MAY & JUNE, 1996

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C.G. Bailey	R.J. Scruton
J.A. Bouchard	S.D. Spicer
R.C. Homeniuk	B.M. Zimmerman

ENGINEERS-IN-TRAINING RESIGNATIONS JUNE 30, 1996

P. Lehn C. Ullicki

In Memoriam

The Association has received with deep regret notification of the deaths of the following members:

W. Dobush	R.J. Noonan
N.N. Shourie	J.F. Wisniewski

President's Message

C.L. Stewart,
P.Eng.



A Salute to Volunteers!

As we head into the summer season, and some of APEM's activities slow down a bit, I would like to recognize the many volunteers who make the organization exist. As I have travelled this year, on your behalf, there is one thing that stands out. Engineers are good volunteers. I have seen many examples of engineers helping out in their communities and committed to making this province a better place to live. Perhaps engineers are known as the silent profession, but I like to believe that in part it is because we serve the public well. We are not newsworthy because our works seldom are scandalous, seldom harm the public and are normally completed with integrity and at good value to the client. It is these same qualities that make an engineer a valuable volunteer.

Through Manitoba's Engineering Profession Act the APEM has the responsibility to ensure to the public of Manitoba that quality engineering services are available and practised by competent and ethical professionals. The strength of a self-governing regulatory system is that the system is self-funding and it provides an accountability through the election of officers from the funding

membership. What makes the whole system work is the significant degree of volunteer involvement. Volunteer involvement minimizes costs, but it also ensures that knowledgeable people are managing the practice of engineering and that the member engineer is informed about and influences the decisions of the Association.

In my previous article on ORAP, (June, MPE), I listed the many committees involved in the operation of APEM. There are about 35 boards, committees and task forces active in APEM. About 300 people, or 10% of our resident membership, participate on committees. The time spent by these volunteers averages approximately 40 hours per volunteer per year. We would need at least another six full-time staff to replace them.

“Many employers allow their APEM members company time and resources to serve the profession. This is both enlightened self-interest... and part of being a good corporate citizen.”

This would mean your annual dues would rise by more than \$100. And it is unlikely that six staff would be able to encompass the same breadth, depth and variety of experience and knowledge brought to the Association by its volunteers.

It is also important to recognize the contribution of employers. Many employers allow their APEM members company time and resources to serve the profession. This is both enlightened self-interest (to maintain a strong and vibrant

engineering profession) and part of being a good corporate citizen.

The need to have a strong volunteer base is now reflected in the EIT experience requirements. Each EIT must provide service to the profession during his or her four-year internship. I believe this sends two important messages. The first is that we value EIT members, their energy and their fresh perspectives and we want to give them a say in the affairs of the APEM before they become registered. Of course, this also refreshes our volunteer base. Furthermore, it ensures that the EIT acquires some knowledge of APEM and becomes acquainted with the obligations of a professional engineer to the profession and the public. To those EITs who have already volunteered-Thanks for taking the first step.

To all of our volunteers- Bravo! I thank you and I thank your employers who allow you to utilize some of their work hours and often other resources (meeting rooms, fax machines, copiers, etc.) to assist APEM. Certainly, the highlight of my year as President has been meeting some of the many volunteers that make APEM the dynamic, healthy organization it is today.

Our new premises on Pembina Highway will provide some benefits to volunteers. The larger Board room means that members of our larger committees can work together at one table. We also have an additional smaller meeting room so we can hold more than one meeting at a time. Another advantage to all volunteers is the availability of parking- FREE parking. No more hassles with those downtown one-way streets, parking meters and parking lots!

If you haven't had a chance to visit your new APEM offices, please stop by 850A Pembina Highway- meet the staff and, if you haven't done it yet, VOLUNTEER to be on an APEM committee. It can be a rewarding experience in many ways. See you soon. □

APEM Establishes New Premises

By: S. M. Matile, P. Eng.

On May 31, 1996, the APEM staff left the Association's downtown office for the last time and moved out to its new location on Pembina Highway.

By June 4, the boxes were unpacked, the computers re-installed, and APEM was back in business. By June 17, the painters had touched everything up, the landscapers had completed their job, the pictures had been hung, the parking lot had been paved, and even the number had been installed on the door. The office was ready for its first Council meeting, followed by an open house for the Association's volunteers.

So, why did we move? All the other tenants on the fifth floor of the Royal Trust building had vacated, leaving APEM the only tenant on the floor. (Was it something we said??) The landlord, wanting to rent the entire floor to a larger client, advised us that we would be unable to renew the

lease; and although he offered us space elsewhere in the building, a physical move was required anyway, stationary would have to be changed, etc. - so we decided to look around.

Executive Director Dave Ennis established a Premises Committee, which examined numerous options, both downtown and suburban, lease versus purchase. The Committee finally settled for 850A Pembina Highway - much larger premises, with plenty of free parking for volunteers and the opportunity for Pembina Highway signage (for public awareness!) - and all for less rent than we had previously been paying!

With less than two months to go, Dave then organized the move and the tenant improvements, and his very talented Secretary, Margaret Little, took care of the interior design and construction. Thanks to Dave and Margaret, and a team of very talented carpenters, electricians, painters and plumbers, etc., our beautiful new premises were 99% ready for us on moving day.

They're now 100% ready - and we're completely settled in - so please come and pay us a visit! We're located immediately south of the Round Table Restaurant, in the "Reid Crowther" building - and the parking is free! □



New Chairman of the Board for CCPE

The Canadian Council of Professional Engineers (CCPE), which represents Canada's 160,000 professional engineers, has elected Mr. John Bate, P.Eng., FCSCE, Chair of the Board, effective May 27, 1996.

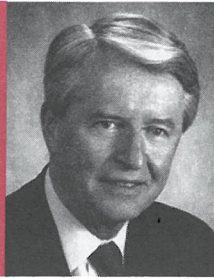
In his incoming address, Mr. Bate pledged to provide stewardship during the next year with respect to a number of key challenging issues currently faced by the profession. Specifically, these include value to constituent "stakeholders", a reinvigorated Human Resources Board to deal with the human resources element of the profession, national coordination of environmental issues, a renewed public relations mandate for the organization, and finding ways and means to address the decline in funding to engineering schools across the country.

With respect to engineering environmental issues, Mr. Bate stated: "We have much work to do on the way engineers deliver their services in the environmental field. This issue has to be managed to the best advantage of the public and the profession."

Mr. Bate, who is from London, Ontario, manages his own company, John Bate & Co. Ltd. His company is active in the design and construction of mainly industrial and institutional buildings.

CCPE Chairman of the Board's Message

John Bate, P.Eng.



Canada's Last Frontier

One of the perks of this job is the opportunity to travel to all parts of this country and spend time with the leaders of our profession in their home environments.

In late April of this year, I had the great privilege to travel for the first time in my life to Canada's Northwest Territories. To me, as a person who had spent all my life clinging to Canada's southern boundaries, Yellowknife was, in my perception, a far, distant, frozen outpost related to gold rushes.

On arriving in that city, I was very pleasantly surprised to discover a modern, tidy community of 17,000, complete with wide streets, tall buildings and pleasant suburbs. It did not appear to me to be any different from a southern community of that size.

While there, I sat in on a meeting of the NAPEGG Council as well as their AGM, both ably chaired by Ann Lanteigne, P.Eng. Later, I enjoyed their awards dinner which expressed to me a warm sense of community and fellowship shared by northern engineers.

In NAPEGG newsletters (an excellent publication), there is a regular feature entitled "Regional Updates", in which engineers working all over the Arctic report on engineering and construction activities. Reports come from such communities as Baffin Island, Inuvik, Cambridge Bay on Victoria Island, Pelly Bay, and Rankin Inlet. All report on increasing construction activity and on their stewardship of the environment. I met young engineers who regularly travel all over the Arctic as part of their duties. As an interesting note, there is a young woman on Council from Iqualit who spent longer flying across the Arctic to the Yellowknife meeting than I did flying from the south.

It is a vast territory with enormous potential. I am told there is more mining activity, both exploration and development, at present than at any other time in the history of the region. It is a very exciting place to be.

On Sunday, the last full day of my short visit, I flew an hour and a half north-east of Twin Otter to the site of the two potential diamond mines at Lac de Gras. The trip was made possible through the good offices of Ruth Spence, wife of the executive director. It was a crystal clear day and I was able to see the whole country, including large herds of caribou, as we flew over it. We landed on a 6,000-foot runway at the BHP Diamond Project and were given a tour of the pilot plant currently being used to make final evaluations for this development. After a hearty meal in camp we flew over the Kennecott Site and were given a description of the drilling program and future development by a young woman geologist.

Truly, this is Canada's last great frontier. If I was a young engineer, I would head north, roll up my sleeves and work shoulder-to-shoulder with the engineers presently working there to help develop our country's great treasure-chest. □

Manitoba Marathon – Results

by: M.D. Vanderpont, P.Eng.

On Father's Day, June 16, three teams representing APEM ran in the Manitoba Marathon Corporate Relay. Running conditions were perfect and the race went off without a hitch.

At press time, official results were unavailable. Unofficially, our guys did very well, and looked great in those APEM – Professional Engineering track tops.

Teams consisted of:

Professional Engineering 1

Darting Dave Whitmore – Vector Construction
Jumping Jim Terris – UMA Engineering
Roaming Roger Boychuk – UMA Engineering
Jackrabbit Jim Bailie – Bailie Surveys
Accelerator Alan Aftanas – Wardrop Engineering

Professional Engineering 2

John (McFast) McFarland – UMA Engineering
Murray (what's the hurry?) Vanderpont – Pioneer Grain
Tim (so trim) Starodub – UMA Engineering

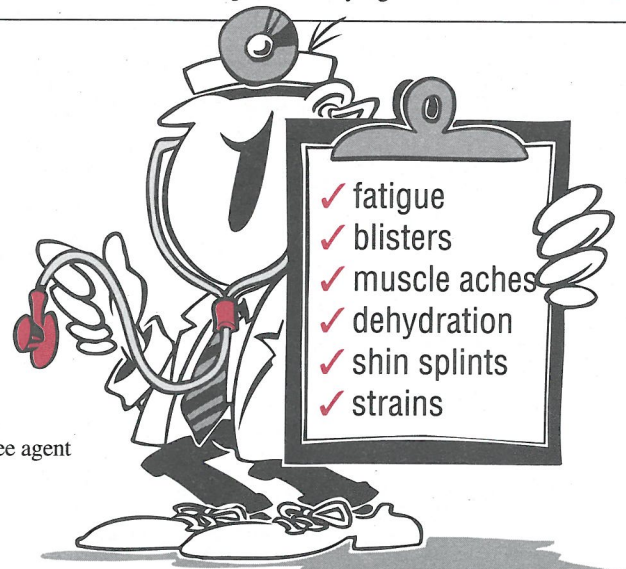
Bill (pitter patter) Penney – Western Reman
David (screamin) Threinen – Honeywell

Professional Engineering 3

Ed (the Eagle) Ryczkowski – UMA Engineering
Tom (the Performer) Price – United Grain Growers
Stephen (the Performer Ver. II) – free agent
Steve (the Rocket) Crockett – Kor Product Design
Ernie (the Mission) Fidgeon – Boeing

Congratulations and thanks to Lance Vigfusson (Highways), Tim Dean (Acres) and Sean Meleschuk (UMA) who ran the Half-Marathon and also volunteered for relay teams. Hopefully I can fit you in next year.

Special notice for Bob Wiebe (Dillon) who ran the full marathon and also volunteered for the relay. One of these years, Bob!



There are several other members involved in the Marathon. Reid Crowther again entered a team, as did Conviron.

Anyone else interested? Give me a call at 934-5960. You'll have a great time, support a worthy cause (Manitoba Society for Community Living) and maybe even get a nick-name! □

Harry Falconer McLean, "Engineer/Contractor Extraordinary"

By: W.G. McKay, P.Eng. (Ret.)

During the Canadian Society of Civil Engineering conference in 1995 at Ottawa, a paper was given in the Historic Section by R.V.V. Nicholls, titled "Harry Falconer McLean, Engineer-Contractor Extraordinary". During his lifetime, McLean completed major construction projects located from Manitoba to the Maritimes. The following information is taken from Dr. Nicholls paper. While not all of McLean's major works are dealt with in this article, those located in Northern Manitoba and Western Ontario are mentioned particularly.

Harry McLean was born in Bismarck, North Dakota in 1883, his father having migrated from P.E.I. and his mother from Ontario. He had the usual schooling with some additional training at a business school in Fargo.

He began his construction career as a water boy for an American railway construction crew, then moved to another similar firm in St. Paul; the A.B. Cook Company. After working in seven American states and with a strong aptitude for "quick learning", he was sent to Toronto where he became the General Superintendent, at the age of 23, of a new Cook Company: the Toronto Construction Company. His first project was to undertake the construction of a C.P.R. line beginning near Toronto and terminating near Sudbury.

Cook and McLean, after leaving the Toronto Construction Company, formed the Cook Construction company which undertook a major transcontinental railway project in New Brunswick, the Montreal Aqueduct and major harbour improvements in Halifax.

In his personal life, he became a British subject in 1916, was married and later established a large residence at Merrickville, Ontario, near Smith Falls. There was no family.

His reputation "to get things done" even "difficult things" was being noted, and during the 1914-1918 war, he was sent overseas to advise on the reorganization of the Canadian Railway Troops. As well as giving construction advice, he gave financial support to the military unit and in turn, he was appointed an Honorary Lieutenant Colonel of the regiment.

McLean was in Halifax at the time of the 1917 Halifax harbour explosion working on the harbour project. Escaping injury, he placed

his men and equipment at the relief committee's command. He became involved in a gigantic rehousing program to replace the 12,000 damaged residences, the completion of the harbour terminal, and the construction of an entirely new railway station, which had been demolished in the blast.

It was shortly after this time that he "felt ready to go it alone" and a series of new companies were formed over the following years, one of which was the well-known Dominion Construction Company. Two major railway ballast production contracts were obtained, one for eastern railway lines and one for the C.P.R. line from Fort William to Winnipeg. This contract was carried out in a quarry operation at Hawk Lake, slightly east of Kenora, Ontario, producing 475,000 tons of ballast in a six month period.

His major career having been launched, he was involved in 30 major contracts and \$300 million dollars of expenditures. These projects illus-

trate McLean's genius; his organizing ability, which permitted him to be "fast off"; shrewd judgement in the selection of gifted men, including engineers; ability to sustain loyalty through his charisma and concern for their welfare; and a capacity to motivate and encourage others to do likewise. H.F. was a "Big Man", both in physique and in spirit.

Perhaps typical of his operations was that, in order to accommodate his extensive travels, he had two Packard cars, a private railway car, a dual-control airplane complete with his personal pilot, and a private air-field.

Typical of these projects was the construction of 74 miles of railway from Cranberry Portage to Flin Flon in 1928. It was a difficult project of muskeg and sink holes. Some contractors would not even bid it. McLean was awarded the contract in December, 1927, and by January 2, 1928, construction was started and the project was completed in nine months. He earned the bonus of \$250,000.00 and operated the railway for a period after its construction before takeover by the C.N.R., earning an additional \$300,000.00.

J.L. Charles, in his autobiography "Westward Go Young Man" reports having known McLean and was acquainted with his generosity. He provided large Christmas parties for the children of The Pas and a substantial donation of several thousand dollars for the purchase of x-ray equipment for the hospital through the local bishop.

Another interesting aspect of McLean's career arises from the fact that he was an avid reader of poetry and an admirer of Kipling. He was inspired to erect a cairn at many of the major projects which he called his "Sons of Martha" cairns. These cairns had a plaque on each of the faces, one reading "In Loving Memory of those who worked and died here". The remaining faces carried the verses of Kipling's poem, "The Sons of Martha". Such a cairn can be seen at the Hawk Lake Quarry on the C.P.R. main line. Another cairn is at the rail line to Flin Flon near Cranberry Portage.

Harry Falconer McLean, engineer/contractor extraordinaire, a great boss, a man of great wealth, and a generous giver of this wealth (but always on an anonymous basis), died, leaving only a modest estate, in 1961. □



Mrs. McLean and the Hon. John Bracken of Manitoba drive the last spike on the Manitoba Northern Railway of the CNR.

Cathy Stewart Wins Award

By: S.M. Matile, P. Eng.

On June 18, 1996, APEM President Cathy Stewart became one of two 1996 recipients of Red River Community College's (RRCC's) Distinguished Alumni Awards for her contribution both to her chosen profession and her community.



Cathy Stewart with Red River Community College Distinguished Alumnus Award.

Cathy, a native Winnipegger, graduated from RRCC with a Diploma in Chemical Technology in 1974. Upon graduation, she went to Thompson, Manitoba to work for Inco Ltd., in Research and Development and, later, in Plant Process Engineering.

In 1982, Cathy and her husband Wayne, also a Chemical Technology graduate employed by Inco, encouraged by Inco, went back to school. They both graduated Magna Cum Laude with Chemical engineering degrees from the University of Ottawa in 1985, and returned to Thompson, where Cathy is now the supervising metallurgist at Inco's refinery.

Cathy's contribution to the engineering community has been significant. One of the founding members and a former Chair of the Thompson Chapter of APEM, Cathy has been a member of APEM Council for five years and is currently President of the Association. She has served on numerous APEM committees – both ad-hoc and standing – since her first election to Council. Cathy has never let geography interfere with her responsibilities as a Councillor, having participated – very effectively – in numerous committee meetings via telephone, if not in person.

In 1990, Cathy participated in and made a presentation at, on behalf of Inco, the Prairie Region Forum on Women in Engineering; and in 1993, she served as a member of the accreditation team during the Canadian Engineering Accreditation Board's (CEAB's) accreditation visit to the

University of Manitoba. She has presented a number of technical papers – at both the local and national levels – to the Canadian Institute of Mining and Metallurgy.

Cathy's contribution to her home community of Thompson has been equally significant. A former Brownie Pack leader, Cathy has been involved with the Girl Guides of Canada for over 20 years, assisting with badge testing and making presentations to the local Brownie and Girl Guide groups. She has been involved with the local Youth Bowling Council (YBC) for over 17 years, coaching teams – including a national Junior Girls' silver medal team and a provincial Senior Girls' gold medal team – and serving on both the local and provincial Executives. She has been a science fair judge at the school, regional and national levels for over 15 years; she is a regular participant in Career Days at the Thompson High School; and she has been an active fund-raiser for the Heart and Stroke Foundation for several years. Cathy is also a Bronze Life Master bridge player. She has been on the local executive of the Thompson Duplicate Bridge Club for over 15 years, and is currently President of Unit 245 (for the area north of the 53rd parallel in Manitoba) of the American Contract Bridge League. Much of her vacation time is spent participating in national as well as international bridge tournaments.

It is no wonder that the Red River Community College chose Cathy for its Distinguished Alumni Award! Her time management skills, alone, must be extraordinary! What I would like to know is – when does this woman find the time to sleep?

CONGRATULATIONS, Madame President! You are clearly a most deserving recipient! □

Engineering Library at U of M Now Provides Employment Information

By: N. Godavari, Librarian

There is another crop of industrious engineering students now hitting the pavement looking for the perfect job. In response, the Donald W. Craik Engineering Library now collects advertisements for engineering jobs posted in the Winnipeg Free Press and the Friday Globe & Mail. This folder is kept at the circulation desk. We are looking to increase this service, so if you have any jobs you would like to post, please send the ads to Norma Godavari by fax (261-9234), mail (351 Engineering Bldg. University of Manitoba, R3T 2N2), or e-mail (ngodava@cc.umanitoba.ca). The jobs are at all levels, so if you are interested, do drop by to take a look. We also have other sources for engineering jobs as well.

The Engineering Library's Home Page (<http://www.umanitoba.ca/libraries/Engineering/Engineering.html>) also lists sources of information about jobs, including the Globe & Mail Careers section. Just click on the "Jobs & Employment Services" section and you will have a menu of first, Canadian and then other jobs. The Globe & Mail site is particularly good: the

"Search" section on the top bar offers a box for you to type in your key word – it's as simple as that. In addition to listing jobs, the "Career Alert" section will allow you to set up a profile of four terms for job-searches, and when the G&M gets new ads, they are e-mailed to you.

Check out the other sources, too: the "Canadian Engineering Network", the Human Resources Development Canada sites, and "Selected Job Openings Listed in Canada Employment Centres".

By the way, the library is offering workshops all summer at 10:00 a.m. daily on its resources, and, on Fridays, the sessions are on the Internet. We also do sessions on INSPEC and Compendex, our main databases. Give Ginny Aho a call at 474-6850 to make sure there is room. We intend to continue these sessions throughout the fall school term, but less frequently. There is a public access WWW computer available for you as well! You should also know that the Engineering Library has the best collection of Internet books on the campus – drop by and take a look – we are a resource for your information needs! □

Attention Project Managers!

By: J. McLeod, P.Eng.

Are you serious about project management? Then you need to know about the Project Management Institute's PMP (Project Management Professional) Certification!

The Project Management Institute is an organization based in the US with over 20,000 members. It is dedicated to furthering the professionalism of project managers around the globe. Professional Engineers make up a large percentage of its membership. Manitoba has a chapter based in Winnipeg, with 80 members at present.

PMP Certification is based on passing a day-long exam and having the necessary experience, education, and record of service to professional organizations. The next examination in Winnipeg will be held Saturday, December 9. You must apply in writing to PMI no later than September 6, if you wish to take the examination.

If you are interested in pursuing certification, please contact Brad Mundy, Director, Professional Development of the Manitoba Chapter at (204) 934-5106 or by email at bmundy@irgain.attmail.com. □

APEM Golf Tournament

(June 20, 1996 – Falcon Lake)

By: B.W. Biglow, P.Eng.

Those that were lucky enough to swing a club in the annual spring tourney were rewarded once again by beautiful weather, a great golf course, excellent food, top notch prizes and lots of camaraderie. Two groups of skilled (lucky?) golfers finished with six under par, requiring a countback to determine the top foursome. The winning team of Brad McCormac, Mike Grimes, Rob Sachowski and Rob McBain was presented with the Landon Cup (hey! didn't three of these guys win last year??) thanks to a back nine with six pars, one birdie and TWO eagles?? (wow!!). The second place team of Charlie Lew, Paul Maycher, Sean Quigley and Brett Todd was presented with the Sullivan Cup for their excellent effort.

The "Texas Scramble" format again proved popular and two long drive holes and two closest to the pin competitions provided extra chances for the big prizes. Engineered Golf donated a "hi tech" graphite jumbo driver at the tenth hole and challenged everyone to try the club, hit the longest drive and then keep the club. Ron Brako was the big hitter. At the thirteenth hole, Rob Sachowski hit the longest ball and took home a new golf bag as his reward. Julien Lavergne and Kevin Shankowsky were the most accurate (or lucky) golfers, they won the two closest to the pin challenges, also taking home new golf bags.

Many thanks to our generous corporate sponsors: UMA Engineering, PCL Constructors, Concrete Restoration Services, Wardrop Engineering, DS-Lea Consultants, MTS, KGS Group, Hydropipe Systems, Reid Crowther & Partners, National Testing Labs, Agra Earth & Environmental, MM Dillon, Vector Construction, Armtec Construction Products, Smith Carter Engineering, Scouten Mitchell Sigurdson & Associates, Pydee Engineering, Engineered Golf, IDG Stanley, Lewis Instruments and Acres International. The support of these companies enabled us to give out prizes to all the "golfers", regardless of score. Thank you as well to the management and staff of the Falcon Lake Golf Course for accommodating us for the third year in a row, keeping the bugs away and serving another excellent dinner.

Even though 120 golfers were registered, last minute cancellations resulted in only 112 teeing off. Your suggestions on how we can fit in more golfers and avoid a waiting list would be welcomed. Watch your mailbox for the notice announcing the next Sports Committee event – the second annual Fall Golf Tournament. This will be scheduled for early September and individual scores will be used to pick the winner. Have a great summer, practice your game and get ready for the fall contest. □

Call For Nominations Engineering Memorial Foundation Corporate Award

The 1989 Canadian Engineering Memorial Foundation is now accepting nominations for its "Corporate Award".

The objective of the Award is to recognize and honour companies that have contributed to the promotion and advancement of women engineers. Contributions can be identified in many forms, and are not limited to: activities and programs to attract, encourage, promote and support women engineers within the company; leadership in promoting the role of women in engineering; involvement in community activities to educate all young people about the engineering profession, to name a few.

Consider nominating your company for this Award! Nomination forms are available from Lorelei Scott, Canadian Engineering Memorial Foundation, 401-116 Albert St., Ottawa, K1P 5G3 (Tel. 613-232-2474, Ext. 241). The deadline for submission of nominations is October 1, 1996.

What's Happening in Thompson

By: G.P. Swaine, P.Eng.

We may be considered remote, but we certainly do not lack enthusiasm when it comes to getting together for professional development, community service and just plain camaraderie.

In the three short years that the Thompson Chapter has been in existence, we have made great progress in growing a strong, dedicated organization. Although many of our Chapter members live and work in outlying communities hours away, we see them and hear from them frequently. Our attendance is regularly between 40% to 60% – an excellent turnout, considering that a large percentage of our members live outside Thompson...very outside Thompson.

A major initiative undertaken by the Thompson Chapter has been incorporating regular Professional Development evenings into our normal schedule of activities. At these sessions, we get together for supper and hear a presentation on an interesting aspect of the field of engineering. This past year, Phillip Kurrie, a Ford representative, gave an elaborate talk on Ford Windstar power-train development. At a later session, we heard a presentation from representatives of DOW Chemical on innovative methods for construction in areas of intermittent or continuous permafrost. These fascinating and educational

sessions were well-attended by members of the Association as well as members of the community. All enjoyed the opportunity to get together for both technical and non-technical discussion.

Another major initiative which is being undertaken by the Thompson Chapter is the development of a core group to interface with local science-and math-based education programs to promote and provide information on engineering as a profession. We expect to co-ordinate, with the "Innovators in The Schools", some new programs which will serve the special needs of the North.

Through a number of planning meetings, a core group of highly motivated and enthusiastic volunteers, which not only includes members of the Association, but also some local educators, is evolving. We intend to formulate the goals of the program and select a leadership format within the next few months.

The primary objectives of the members of this group include:

- Promoting engineering as well as the importance of primary math and science education.
- Creating an awareness of engineering as a profession within the local communities.

- Instilling enthusiasm and excitement about engineering and technical careers.
- Developing some community visibility or, as one person put it, "crawling out from our hiding places" and letting people know about the wonderful things we do.

We are excited about the development of this new program, and there is total agreement on the importance of reaching students as soon as they become exposed to the exciting world of science.

We had an extremely successful Spring meeting, as well as a productive informational session given by Dave Ennis, the Executive Director of APEM and Bill Brisbin, a member of the Canadian Geosciences Council on the proposed revisions to the Engineering and Geoscientific Professions Act.

Our final regular winter event brought 47 people together for a fun night of bowling. The joint effort of the APEM and Canadian Institute of Mining and Metallurgy (CIM) found engineers and technicians in very unusual positions for bowling, but all were awarded for either their skill or lack of skill. It was an evening of fun and laughter as even our President, Cathy Stewart, demonstrated her unique technique of hopping on her right leg while bowling with her left hand.

Things may be settling down somewhat for the summer, but we are expecting to come back with our usual energy and enthusiasm in the fall. Our first event will be our annual golf tournament. □

Council Reports

TUESDAY, MAY 14, 1996

By: J. Lucas, P.Eng.

AT WHICH COUNCIL DISCUSSES NEW PREMISES AND OLD TURF WARS

I must warn you that the writer served double duty at the meeting as both Councillor and Reporter. As such, the following reality results from my particular spin on any item and also to the relative degree that I believe I was correct on any topic (in spite of being voted down).

Standard housekeeping processes moved along while I racked up my first 20 winks.

Progress on our new offices was discussed.

New office space, new signs, new boardroom tables, new chairs and new refrigerator – all reviewed and all very exciting. Next month we're in our new offices at 850A Pembina Highway – so drop in and check things out.

Now, for you acronym fanatics:

- CTTAM/APEM meetings are on-going and proceeding apparently well. Several questions remain to be addressed and answered.
- CCPE is also conducting on-going meetings with CCTT in Ottawa.

A very serious journey took place to the Land of Defining the Practice of Engineering. Imagine 14 people discussing what no one can define, in terms that no one understands, to come to a conclusion that no one has reached – all in a timely and non-elitist fashion. Any volunteers out there? A meeting with all members is/was scheduled for June 12, 1996 – hope you warmed up your Thesauri (uses?) and gave it your best!

The CCPE Board Meeting was to be held May 24, 1996 in Toronto with Doug Chapman attending and waving the APEM banner. Good luck, Doug.

Very lively, exciting and meaningful discussions held on status of The Engineering and Geoscientific Professions Act, Annual CCPE Directors' Board Meeting, CCPE Vision for the Canadian Engineering Profession, CCPE Awards recommendation and Investigation Committee reports (easier written than done, may I add). Stay tuned for any late-breaking news.

In summary, a median meeting, lunch good, weather bad. See you next month! □

MONDAY, JUNE 17, 1996

By: B. Thomson

AT WHICH COUNCIL FOCUSES ON THE ISSUE OF MANDATORY REPORTING OF PROFESSIONAL DEVELOPMENT ACTIVITY

The first Council meeting held in the new premises began with everyone being able to sit at the conference table together. This was a first.

The usual business of Council was moved along very efficiently by President Cathy Stewart. The major discussion at this meeting involved the report from the Professional Development Committee on Mandatory Reporting.

Mr. Kramble, Chair of the Professional Development Committee, addressed the Council concerning the Committee's report on Mandatory Reporting of Continuing Professional Competency Activity. He explained that the committee has been working hard and involved in much discussion and debate over this issue for a lengthy period of time. He presented the report and recommended that Council implement a plan of Mandatory Reporting of Professional Development within the APEM.

After Mr. Kramble left the meeting, there was a lengthy discussion on this issue. It was generally agreed by Council that it is an ethical obligation of every Professional Engineer and EIT to engage in professional development activities on an ongoing basis. It was also agreed that the issues raised by the Law Reform Commission make it necessary that we, as a regulatory body, have current knowledge of the levels of professional development of the membership.

The discussion centered on the procedures and methods of implementation and the disciplinary consequences for members who do not report. It was recognized that there will be members who will submit forms claiming zero professional development and that it is easier for companies in the city to participate in ongoing P.D. than their rural counterparts.

Other questions that were raised included: Can the Association require the reporting of professional development activities? Can members who fail to report be deregistered or does the Association have to invoke the disciplinary process? Would peer review be a better method of judging competence? All these issues, and many more, resulted in a lengthy and interesting discussion.

A motion was made and carried that there will be mandatory reporting of continuing professional development. Ms. Matile volunteered to draft a proposal addressing the procedural problems of implementation, for consideration by Council at the July meeting. It seemed to be agreed that this was the first step in ensuring continuing competency in the profession and that the gathering of this information would give APEM the base necessary to determine future requirements.

The length and importance of this discussion, and the fact that an Open House for the new offices was occurring outside the conference room doors, made it necessary to defer some items on the agenda to the July meeting. The meeting was adjourned and the Council joined members at the Open House for fine wine, fine food and fine company. □



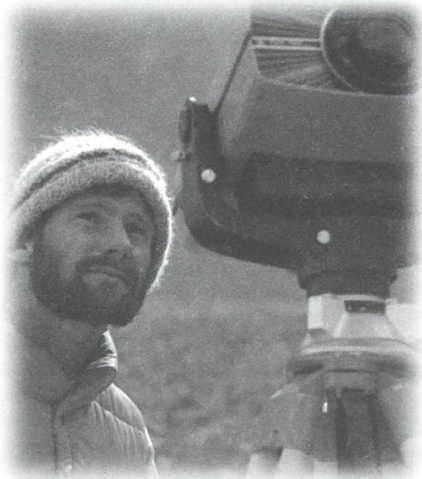
First Council meeting in new premises.

University News



By: S.M. Matile, P. Eng.

Faculty Council (Engineering Faculty, University of Manitoba) recently agreed to "shelve" the geological engineering program. The decision, however, requires the approval of Senate – a decision that will hopefully be forthcoming before the commencement of the school year! Due to the uncertainty of the future of the program, however, only eight students had "signed up" for enrollment in second-year geological engineering as of June 20.



Speaking of Geological Engineering, the weather this spring was so bad that this year's Field School, a mandatory course for all geological engineering students, had to be cancelled. It is expected that this course will be offered during the summer months, this year, although it is questionable how many students will be able to attend. APEM has advised the University that, for students who would have graduated in October, 1996 were it not for the cancellation of the Field School this spring, upon completing the course and enrolling as EITs, their experience "clocks" will be considered as commencing on May 29, 1996.

Dr. Don Burn, P. Eng., has been appointed official Head of Civil and Geological Engineering. Dr. Burn was appointed acting head of the department last year. This appointment ends months of speculation that the person filling the position may not be eligible for registration as a professional engineer, may be a woman, or – heaven forbid! – both! Dr. Burn has proven, over the past year, to be an extremely effective administrator.

Dr. Attahiru Alfa, P. Eng. has been appointed Head of the Mechanical and Industrial Engineering Department, replacing Dr. Hassan Soliman, P. Eng., who stepped down after a year in the position, preferring research to administration.

Dr. Glenn Morris, P. Eng., member of the Civil Engineering Department for 31 years and Associate Dean of the Faculty of Engineering for the past two years, retired from paid active duty (though not, we understand, from all of his many commitments) in July. Dr. Morris will be sorely missed. His shoes will be partially filled, we understand, by **Dr. Doug Ruth, P. Eng.**, who is just returning from a one-year sabbatical leave, and who has agreed to serve as a part-time Associate Dean.

Dr. Ross Bulley, P. Eng., Head of the Biosystems Engineering Department, who suffered what appeared to be an aneurysm in March, is back at work following a miraculously speedy recovery. Welcome back, Ross – and take it easy!

The Faculty is working on a proposal to offer graduate degrees in engineering in Malaysia and Singapore, and has received funding to introduce an undergraduate student exchange program with certain European universities.

Meanwhile, at the undergraduate level, it appears that the one-plus-four-year engineering program will be offered commencing September, 1997. Students planning to take engineering after this coming school year will first have to complete a pre-requisite "university one" year of math and science courses before being admitted to the engineering faculty. Once in the faculty, they will

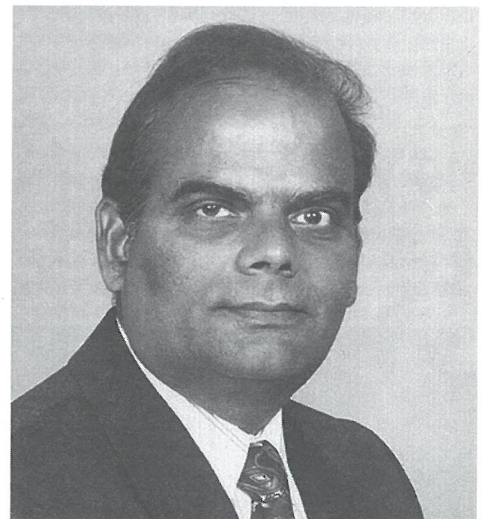
be faced with an additional four years of study prior to graduation. The number of courses taken over the five years will not differ from the number of courses taken currently, however – they will simply be distributed over an additional year. (Which probably isn't a bad idea, given the current engineering student average of 4.7 years from intake to graduation, anyway!) There are many details yet to be ironed out, and the implementation of the process will no doubt be one of Dr. Ruth's primary responsibilities. Good luck, Doug!

The Mentor program for Women in Engineering, which involves professional engineers and engineering students, enjoyed a very successful first year, this past year. Anyone wishing to participate in next year's program is asked to contact Irene Mikawoz (474-8497) or D'Arcy Haid (474-8098). □

Engineers in the News

By: S.M. Matile, P. Eng.

Madhav Sinha, P. Eng. is the first Canadian to have been elected to the International Academy for Quality, a Germany-based think-tank organization.



Madhav Sinha, P. Eng.

1996 U of M Engineering Endowment Fund Competition Now Open

The goal of the Engineering Endowment Fund is to provide support for initiatives that promote excellence and innovation in the Faculty of Engineering at the University of Manitoba. Qualifying activities include research and scholarship, teaching, student activities, equipment and facilities, academic and support staff, library, and outreach.

Proposals from staff, students, and alumni, all of whom are contributors to the Fund, are welcome. Application forms and instructions are available from the Dean's Office.

This year, approximately \$70,000 is available for distribution by the committee.

To apply for funding, one copy of the completed application should be submitted as early as possible, but no later than 4:00 p.m. on Wednesday, November 13, 1996 to:

Irene R. Mikawoz, P.Eng.,
Director of Student Affairs,
Faculty of Engineering
The University of Manitoba
Winnipeg, Manitoba R3T 5V6
Telephone: (204) 474-8497 □

Mr. Sinha, a technical development officer and in-house TQM consultant with the Manitoba Labour Department, was selected for his pioneering contributions to the quality movement in Canada. A past Chair of the Manitoba Section of the American Society for Quality Control (ASQC), he has won more than a dozen national and international awards for his quality movement leadership, and was listed in the 1993 first edition of the International Who's Who in Quality. □

Changes to Engineering Profession Act Proposed Or Where Were You on June 12, 1996?

By: B. Thomson and S. M. Matile, P. Eng.

This Association is proposing significant changes to the Engineering Profession Act – the legislation that governs the regulation of the practice of engineering in this province – and June 12 was **your** opportunity to seek clarification on, or voice your concerns about, the proposed revisions.

Perhaps it was the gorgeous weather that evening. Or perhaps all of our members are in favour of including the registration of geoscientists and group practice licensing, and the information provided over the months leading up to the meeting was crystal clear. Whatever the reason, there were plenty of spare seats at the meeting. A total of 37 people, including eight Councillors, two Legislation Committee members, the Association's legal counsel, two APEM staff members, three EITs, three technologists and two spouses, turned out to hear Legislation Committee Chair Barry MacBride's excellent presentation on the proposed Act changes.

Barry commenced with a brief history of the proposed Act revisions, which commenced with the decision in 1988 to include a licensure requirement for all corporate entities practising engineering, and evolved through reducing the grace period for paying annual dues, including the registration of geoscientists, gender-neutralizing the document, etc. to recommending a revised definition of the practice of engineering. He described the "stakeholders" (geoscientists, technologists, land surveyors, architects, etc.) from

whom comments had been solicited, and some of the concerns they had raised. He explained the difference between certification (right-to-title) and licensure (right-to-title-and-practice) regulatory regimes, and he summarized the conclusions reached by the Manitoba Law Reform Commission following its study of the regulation of professions and occupations in Manitoba. He then circulated a questionnaire to those present, and requested their input on such issues as whether the definition of engineering should be expansive (brief, broad-sweeping and general) or exhaustive (long, detailed and all-inclusive), whether they thought it was in the public interest for geoscientists to be registered (i.e. whether the work of geologists, geophysicists and geochemists affects the public welfare), whether licensure should be restricted to engineers who provide services to the public, and whether the terms "engineering" and "professional engineering" are synonymous.

One concern raised was that individual engineers or geoscientists wishing to start their own companies will not be able to do so until at least five years following registration – which is at least nine years following graduation. Another issue that received considerable attention was the proposed inclusion of the disciplinary provisions in the Act, rather than in the By-laws. The reason for the inclusion of the details of the disciplinary process in the Act, we were told, was to enable the Association to discipline former members,

and thereby "plug" the loophole which allows members to resign and avoid the disciplinary process. The argument against it, of course, is that if the Association wishes to change its disciplinary procedures, even slightly, it will have to approach the Legislature and request an Act change (in other words, no changes will be possible!) Then, of course, as it was pointed out at the meeting, the most serious consequence of a disciplinary hearing would be the removal of a member's right to practise – so is there really any need to plug the resignation "loophole".

One significant proposed Act change which has not been mentioned, either in the literature or at the meeting, regards admission to the engineering profession in Manitoba. Currently (and for many years!), any applicant for registration who does not hold an accredited engineering degree, and who has to complete examinations other than confirmatory examinations to demonstrate academic proficiency, requires six years of engineering work experience to qualify for registration. The proposed revisions will remove this requirement, and allow Council to establish work experience requirements for such applicants which are more consistent with the requirements for other applicants. This revision, while not of particular concern to members of this Association, will be of particular interest to immigrant engineers who are in the process of applying for registration.

The completion and return of the questionnaire circulated at the meeting will assist the committee in its decision-making process regarding the "difficult" issues.

All members are encouraged to submit comments on the revised act to the Legislation Committee as soon as possible. Your organization can only act on your behalf if it is made aware of your questions and concerns. □

40 Years Later

Len Bateman in new APEM premises with photo of APEM Council 1956, in its new premises. (Mr. Bateman is seated back left in

the photo. The desk in the lower right-hand corner of the photo is still in use at the new premises – 40 years later!) □



NEWS RELEASE

APEM Becomes a GST Registrant

APEM has been advised that, effective April 24, 1996, it is no longer eligible to opt out of collecting GST on annual dues, EIT dues, admission fees, examination fees, etc. Please be advised, therefore, that, effective immediately, all memberships and services provided by the Association to its members, EITs and applicants – including annual dues, EIT dues, application fees, examination fees, etc. are taxable. □

News From Other Associations

By: L.Y. Ganetsky, P.Eng.

Alberta

Ford Aims to Be Female Friendly

Ford had its male designers put on false nails so they could get a better idea of how suitable instrument panel knobs in new vehicles are for women. Although 50 percent of all motoring public are women, Ford's management admitted that its predominantly male workforce hasn't always reflected the society it sells to.

Ford's Pat Schockling, manager of the plant vehicles team for the Ford Bronco, is the company's highest-ranking woman. She says more flexible conditions, such as day-care and work-share, are being introduced to attract more women engineers.

Newfoundland

Engineering Students Enter Concrete Canoe Competition

The Memorial University of Newfoundland's Civil Engineering Classes of 1997 and 1999 are entering the 1996 National Concrete Canoe Competition. This is the second year for the event and the first entry from Memorial. The event is organized by The Canadian Society for Civil Engineering (CSCE) and was scheduled for early May at the Olympic Basin in Montreal.

The canoe must be designed, built, and paddled by engineering students. Rules govern such things as the type of cement used, reinforcing materials used, and other methods of increasing structural properties of the canoe. The canoe must also float when filled with water. There are three different races: sprint, slalom and endurance. For each race, there can be men's, women's and co-ed

crews each having two paddlers. The overall scoring for the competition will be a combination of the races (40%), design paper (25%), oral presentation (15%), display (10%) and evaluation of the final product (10%).

There has been a US National Competition since 1988 organized by the American Society for Civil Engineers (ASCE). This year, the Canadian winner will be entered in the American competition as well. In previous years, the American winners have had canoes 17 to 18 feet long and as light as 100 to 125 pounds.

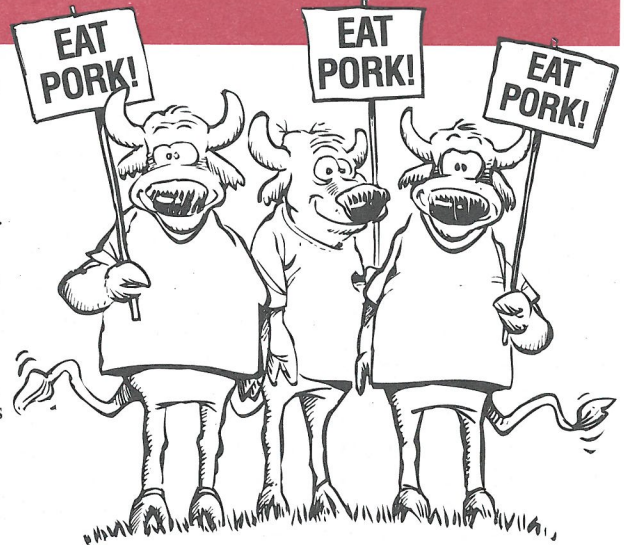
The two civil classes making up the team are on work terms from January to April making the project difficult because there are not many students in the St. John's area. Members of the Concrete Canoe Team are gaining experience in concrete design, form-work, and project management. It also helps to promote Memorial University and the Faculty of Engineering and Applied Science as well as engineering in Newfoundland.

Ontario

RoboPork Automates Dangerous, "Smelly" Job

Most people don't think of meat-packing plants as inspiring. But a visit to one inspired a University of Toronto mechanical engineering professor to develop an automatic pork-grading system called RoboPork, which was scheduled to be demonstrated to industry and media at the University of Guelph in June.

Professor Andrew Goldenberg, P.Eng., saw an Ontario agriculture ministry call for proposals to



automate processes for the meat industry, and subsequently paid a visit to Quality Meat Packers, a small meat-packing plant in downtown Toronto. His first impression: "Many people, many knives, a lot of blood and smelly!" Goldenberg watched the people at the plant working, and talked to them about what parts of the process might be automated. The eventual result was RoboPork.

A mechanical arm with two "hands", RoboPork grades meat much like human operators. First, its sensor hand locates the proper spot on the side of pork, seven centimetres from the spine, between the third and fourth ribs. Then, its other hand inserts an ultrasonic probe at the prescribed angle and velocity. Purchased commercially, the probe is the same kind used to grade pork manually. It emits and receives infrared waves to determine the meat's fat content.

In development since 1992, RoboPork is a collaborative project of U of T, the agriculture ministry, and the University of Guelph. Led by animal science professor Howard Swatland, the Guelph research team developed the robot's sensors, while Goldenberg and the U of T team worked on its mechanical arm and electromechanical controls.

Automated meat-grading ensures consistency, reliability and repeatability, Goldenberg says. Although critics of automation charge that it steals badly needed jobs, Goldenberg believes many people don't want the kinds of jobs robots replace anyway. "As the economy improves, fewer and fewer people want to do this type of work, because it can be menial and dirty. As well, industry desires the reliability and quality that robots can provide. In the long range, automation contributes to the economy."

The next steps for RoboPork will depend on reaction to the June demonstration, but Goldenberg suspects the meat-processing industry will want the system to be faster and cheaper. RoboPork currently takes nine seconds on average to grade a carcass; but Goldenberg thinks meat-packers will want to see speeds of five or six seconds, which can be achieved by replacing some of RoboPork's hardware. □

Improving Our Image

Cont'd from page 1

promoted to a non-technical job. This can be frustrating and a little bit scary, as you are forced to learn new skills and try new things. How we cope with these new challenges is important to our individual careers and plays an important role in how we are collectively perceived.

We often sell ourselves short in terms of our ability to learn new skills outside of our traditional roles. Having worked with people from a wide range of professions, it has been my experience that engineers can more than hold their own in performing a wide range of non-technical tasks. We may have had less opportunity to study a broad spectrum of subject areas during our formal education than people in some other professions, but we shouldn't be discouraged. There are a wide variety of books and courses available for us to obtain the so-called "non-engineering" skills which we need in today's dynamic business envi-

ronment. If we could figure out integrals and derivatives, surely we can learn something about management principles and communication techniques.

The foundation upon which our profession is built is, by definition, the practical application of scientific principles. I am not suggesting that this change. Indeed, for our profession to remain strong, this must continue to be central to what we do. I do believe, however, that in today's work environment, engineers can benefit from having other complementary skills at their disposal. By broadening our horizons, we can increase mutual understanding between ourselves and other sectors of society, and also enhance the credibility and reputation of our profession.

Although changing the stereotype of the engineer won't be an easy or quick process, I am confident that we are up to the challenge. In the meantime, we can all take some comfort in the fact that despite their shortfalls, the engineers in the Dilbert comic strip are the only characters with a shred of common sense. □

Do You Have an Image Problem?

As an Engineer, You May Have An Image Problem...

- If your idea of good interpersonal communications means getting the decimal point in the right place.
- If you stare at an orange juice container because it says 'CONCENTRATE'.
- If you carry on a one-hour debate over the expected results of a test that actually takes five minutes to run.
- If you can name six Star Trek episodes.
- If you still own a slide rule and know how to use it.
- If the thought that a CD could refer to finance or music never enters your mind.
- If you rotate your screen-savers more frequently than you rotate your tires.
- If you can type 70 words a minute but can't read your own handwriting.
- If your wristwatch has more buttons than a telephone.
- If you have more friends on the Internet than in real life.

Professional Engineers are not Notary Publics

By: S. M. Matile, P. Eng.

We receive numerous enquiries from Professional Engineers, as well as from the general public, as to whether an engineer may notarize documents as a Notary Public, or witness a signature on a document as a Commissioner of Oaths. The answer, of course, is NO – not unless the engineer also happens to BE a Notary Public or a Commissioner of Oaths!

The Canadian Government's Department of Foreign Affairs and International Trade has long seen fit to trust engineers (among others), professionals who are bound by a Code of Ethics, as guarantors for passport applicants. The fact that we are professionals, however, is not sufficient to allow us to notarize legal documents. This privilege is reserved for Notaries Public – lawyers who have applied to, taken an oath of office for, and been appointed by, the provincial government's Department of Consumer and Corporate Affairs, for business purposes. Similarly, only Commissioners of Oaths, who have been appointed by the same government department, may serve as witnesses to signatures for business purposes. (Such businesses would include real estate, insurance, chartered accountancy, banking, etc.)

So, the next time your neighbour or your cousin asks you to witness a document, if it's not a passport, and you haven't been appointed as a Commissioner of Oaths or a Notary Public, you're not qualified! □

Coming Event

The International Conference on Deep Geological Disposal of Radioactive Waste

To be held in Winnipeg, Manitoba, September 16-19, 1996.

For registration information, contact:
Ms. Shannon Worona, Conference Secretary
Geological Disposal Conference
Atomic Energy of Canada Limited
Pinawa, Manitoba ROE OLO

Phone: (204) 345-8625

Fax: (204) 345-8868

E-mail: woronas@wlaecl.ca

Website: www.science.mcmaster.ca/cns/html

Words For Everyone

By: M.S. O'Laughlin, P.Eng.

The use of gender-neutral language is becoming a key element in today's communication, not only because of its "political correctness", but as a tool for including the whole audience. Words relating to one gender only distract attention from the focus of the discussion and can inadvertently offend those of the other gender who have been excluded.

Words are our basis for communication and, if not chosen carefully, can present images to the reader (or listener) that we had not intended to create. People tend to picture only one gender if words such as stewardess and policeman are used instead of gender-neutral terms like flight attendant and police officer. It is important to send the message that both genders are capable of working in these occupations.

A reluctance still exists in many of us to change our vocabulary to include these gender-neutral terms – mainly because of the familiarity of our existing language, but also because we may not be aware of acceptable alternatives.

The approach to including more gender-neutral terms in our speech does not simply involve replacing "man" in all current words with "person". As most of us have probably experienced, this can lead to awkward words and phrases.

To provide "food for thought" in the transition to more gender-neutral language in business and in casual conversation, different categories of words with gender-specific language versus the alternate gender-neutral language will be presented in a series of brief articles in "The Manitoba Professional Engineer" in the coming months. Categories included will be: Occupations, Sports, Roles and Relationships, Family, and Common Phrases.

Some words may already be "the norm" for your communication while others may provoke thought for including both genders in your communication. If nothing else, we hope the words provided may heighten your awareness of the options available for gender-inclusive language.

The following is the first category of gender-inclusive words and terms. The list includes a sample of words used for occupations and gives both the traditionally used word or phrase and the gender-inclusive alternative. □

OCCUPATIONS

anchorman	anchor, newscaster, announcer
businessman	executive, business person, professional, entrepreneur
cameramen	camera crew, camera operators
clergyman	cleric, member of the clergy
doorman	door keeper, porter
fireman	firefighter
foreman	supervisor
journeyman	trade worker
mailman	letter carrier, mail carrier
meter man (utilities)	meter reader
paperboy	paper carrier
policeman, policewoman	police officer
salesman, saleslady	sales representative, sales clerk, sales agent
steward, stewardess	flight attendant
taxman	tax collector
weatherman	meteorologist, weather reporter
workman	worker

Reference: Ontario Women's Directorate, "Words That Count Women ~~Out~~In", 2nd Edition, 1993.
Note: Ms. O'Laughlin is a member of APEM's Women in Engineering Advisory Committee (WEAC).