Institution of Mechanical Engineers

Central Canada Branch



CHAIRMAN'S ANNUAL REPORT FOR 2006.

Purpose This Annual Report is to record the affairs of the Central Canada Branch of the

Institution of Mechanical Engineers for the period from 1st January to 31st

December 2006.

Branch Committee – as from the Annual Meeting March 2006

Position	Name	Membership Grade
Chairman	S.C Armstrong	Fellow
Programme Chair	VC Mathur	Fellow
Hon. Sec.	T. Ponniah	Asst. Member
Hon. Treasurer	D. Pigott	Fellow
Recruitment.	I Mansell	Fellow
& Retention		
Historian	R. Parsons	Fellow
& Archives		
Web Master	S.R. Hitner	Asst. Member
Past Chairman	P Apperly	Fellow
USA Northern Rep.	Vacant	-
Manitoba Panel Chair F.E. Stock		Fellow

Branch Events

We continued with the IMechE CCB orchestrated programme collaboration with three other U.K. professional engineering institutions active in Canada. We sponsored a series of ten lectures on the broad theme of *Engineering Project Management – Lessons Learned*. The programme ran from the period September 2005 to May 2006. The aim was to introduce Engineering Project Management to engineers, technologists and managers working in all disciplines, with an emphasis on Lessons Learned through major real-life projects. The January – May 2006 lectures included:

January 21 Feb 06, 6:15 p.m. Subways and Tunneling

Mr. Brian Garrod, Senior Vice President, Tunnels, with Hatch Mott Macdonald spoke to us about Project management of the Sheppard Subway project.

Fri, 17 Mar (St. Patrick's Day) AGM and Lessons Learned from Engineering Disasters

Our own Don Lawson reminded us that while many formal methodologies of project management exist, the most important ingredients for success are lessons learned from disasters – preferably not our own!

Tues, 21 Mar, Westin Bristol Place: Project Management on the Hibernia Oil Platform

Hibernia is the first Gravity Base Structure ever designed to withstand iceberg impact. The presentation covered the methodology and processes employed to manage this mammoth project. Our speaker Dr. David Tay PhD, PEng, is Sr. Principal at Morrison Hershfield Ltd.

Tues, 18 Apr, 6:15 Westin Bristol Place: Pharmaceutical Manufacturing Plant

Mr. James Lew, BArch, Vice President Life Sciences Division, Morrison Hershfield Ltd. addressed project management issues and lessons learned in the building of a pharmaceutical plant.

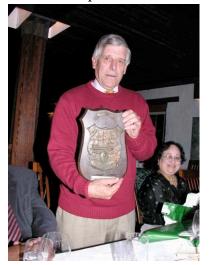
Tues, 16 May 06, 6:15 p.m. Large Aircraft Landing Gear

Mr. Marco Perrella Director and Chief of Structures, Goodrich Corp. Landing Gear Division, focused on project management issues in the complex development cycle inherent in the aerospace industry.

8th **July, at Erindale Park,** We held the traditional IEE/ IMechE joint picnic. Those who attended were rewarded with beautiful weather, lots of fun and camaraderie, and excellent catering.

IMechE Presidential Visit 6-12 Sept 2006.

Alec Osborn was appointed the 121st president of the IMechE on 24 May 2006. The first official international presidential visit was to central and eastern Canada 6-12 Sept. CCB had the



pleasure of hosting the IMechE delegation 9 -12 Sept. IMechE CEO, Sir Michael Moore and Lady Penelope Moore accompanied Alec and his wife Mary. The CCB committee organized a full series of events. The presidential team arrived from Montreal Saturday 9 Sept. Phil Apperly and Don Lawson took our visitors to former branch chair Frank Gosling's Caledon farm on Saturday afternoon. This was a chance for old friends to reconnect. The social event at the farm was followed by an excellent dinner at the Millcroft Inn on Saturday evening. This was a chance for the committee members and spouses to meet the president and CEO. A special award was presented to Sir Michael since this was to be his last official trip to Canada. Michael left IMechE 20th Dec 06. Don Lawson presented Michael with an artefact (see photo) made from metal that can be

Sir Michael Moore Receives Gift

traced back to Lord Nelson's fleet. This was felt to be an appropriate gift for a retired Royal Navy Admiral.

On the Sunday, Committee members escorted our guests around Niagara Falls and Niagara on the Lake.



Formal events kicked off on Monday morning. The president, CEO and members of the CCB committee met with the PEO president Pat Quinn and his team in the Engineers room at the Ontario Club. PEO gave Alec an overview of the history of the Canadian P.Eng qualification and the iron ring. We discussed the PEO approach to recognizing a C.Eng qualification as a satisfactory requirement for the P.Eng license. We also discussed adherence to the Washington accord. In a nutshell PEO does not adhere to the Washington accord. The registrar made it clear that PEO assess C.Eng cases individually. A C.Eng will be required

to produce a university transcript and it will be compared to the PEO list of criteria.



President Quinn acknowledged PEO's need to adopt a more flexible approach to recognizing non-Canadian qualifications. This is an issue that EC^{UK} will address. President Quinn will visit IMechE London HQ in Feb 07.



Over 100 people attended the **16th George Stephenson lecture** at the Royal York Hotel on the Monday evening. The evening began with the presentation for the Regional/Branch outstanding member award for 2005. Alec presented the award to Don Lawson for his outstanding contribution to the development and packaging of the 2004/05 Nanotechnology series of lectures onto a CD.



This award was established in 1994. It recognises that there are many members acting with great enthusiasm on behalf of the Institution at a local level. We extended our congratulations to Don, who has served CCB for many years.

The GSL, entitled "Tales of an engine designer", chronicles Alec's career in the design and development of formula 1 and diesel engines since the 1960's. Alec emphasized how his roots **Don Lawson – Award for 2005** as an apprentice studying for an ONC / HNC grounded him well for a successful career as a practicing engineer. The presentation is available online at the CCB website: **imeche-ccb.org**.

Ivor Mansell thanks Alec Osborn

2006 – 2007 Programme – Energy Lecture Series

We continued the programme theme for 2006 / 2007. This season the theme was Energy, and included lectures on power generation, IT energy costs, windmills, sustainable energy, and Kyoto. The 2006/2007 programme also included social events starting in 2007. This includes a celebration of the Chinese New Year in February 2007.

On 21 September 06 Mike Henville delivered a lecture on the Interconnection of Distributed Generation systems to local utility distribution systems

Mike Henville is the current Chair of the IET (formerly the IEE) and works as a Project Manager at the Canadian Standards Association. He explained his approach to the development and publication of the first Canadian National Standard for the interconnection of Distributed Resources to local distribution grids.

On 21 October 06 Chandrakant Patel, the Hewlett Packard guru on energy from Palo Alto, described how companies can halve their energy requirements for server rooms. This interested civil, mechanical and electrical engineers, as well as those in IT who have to pay for, or install, server rooms. NOTE: This may even allow you to install the new switches that give off more heat than a gas barbeque! Afterwards, Victor Garcia, the Chief Technology Officer of HP Canada, described the advances in RFID and gave a **tour of HP labs**!

On 2ndDecember 06 The IET/IMechE traditional Xmas dinner was held on at the BOT. Stewart C. Russell gave a Lecture on Wind Energy.

He focused on wind turbines. Stewart gave us an insight into his practical experience from his days in Scotland to his current career with Epcor. We found out how wind turbines work, where they work best, and why manufacturers can't build them fast enough. This includes the one at the Exhibition grounds. Further details can be found at http://scruss.com

Meeting attendance

Attendance at the above meetings varied from around 20 up to 60, with around 100 at the George Stephenson Lecture. The collaborative effort is a first and so far so good.

Relations with the Institution of Electrical Engineers, British Computer Society and Institution of Civil Engineers

Our joint programme on project management is a major step in fostering good relations with other UK professional institutions. In addition to holding joint lectures we also hold an annual Xmas dinner with IEE. We continue the good camaraderie.

Relations with PEO / CCPE

The formal meeting was helpful, and is reported under the presidential visit above.

IMech E Headquarters Support

The Branch has, as usual, been well supported by headquarters staff during the past year. The current Branch Chair Stephen Armstrong attended the Council of Regional Chairmen held in conjunction with the UK Annual General Meeting at the end of May. This was a magnificently well planned and executed event. Support from London HQ could not be better.

Professional Reviews

Four professional review Interviews were initiated during 2005, for members wishing to upgrade their level of membership. We completed these during 2006.

Web Activities

The CCB has continued to update the web site at www.imeche-ccb.org. The web site and the Internet are used where possible as the preferred method to communicate with members. In line with recent improvements on the UK website, your committee implemented improvements and updates to our own site brought us in-line with the UK model. We are very happy with our enhanced online image

Financial situation

The Branch Treasurer's Report summarises the current position. Because our lectures have attracted members of other societies this year, not all of whom have cost-sharing agreements with us, we have been somewhat victims of our own success. Our budget, as always is vetted and approved by London, but we are always at the mercy of the fluctuating value of the Canadian DollarTo help balance our budget, we designed future-programmes that share costs with other UK professional institutions.

Acknowledgements

My thanks go out, as usual, to all members of the Branch Committee for their time and talents. I would like to highlight the extra special contributions of the following:-

- VC Mathur, Programme Chair for continuing the excellent work developing our Energy lecture programme. VC has worked well, integrating the needs of the IMechE and the other institutions.
- Des Pigott for staying on top of our finances and providing us with timely and accurate reporting
- Tim Ponniah for his work as Hon. Secretary. Tim has been a source of support throughout the year taking a proactive attitude toward the job
- Phil Apperly, past chair for relentless support to me as chair. Without him I would have floundered. He has stood in for me on several occasions when my work commitments have not allowed me to participate in an IMechE event.
- Steve Hitner for enhancing our web site. Our online image has truly been enhanced.
- Ivor Mansell for support in the area of membership retention and general counsel.

- Ron Parsons for maintaining our archives. He is reviewing our historical documentation and identifying important documents that will eventually be archived by Phil Apperly. This will protect the history of the branch for future generations.
- The Institution's staff in UK for keeping us up-to-date and informed. We have received more direct communications from the likes of Maria Taylor (International Affairs) and Joanna Fox, Manager, Regional & International Operations (awards and recognition) of late.

Strategic issues

- We seek to continue to provide a broad and interesting programme of talks and visits to meet the objectives of I Mech E. and members' CPD goals.
- Recruit volunteers to serve on the Branch Executive and ensure sufficient experienced Committee members to form a cadre from which to select Branch Officers
- Be cost effective and operate within the agreed Business Plan.
- Assist members moving to the area and arrange Professional Interviews when requested to do so by the UK.
- Work with HQ on the evolution of the Institution. Provide insight on overseas
 perception of changes, and constructive criticism of proposed changes to
 Governance and operations as appropriate.
- Work with PEO, OSPE, IET, ICE, BCS and others to further the aims of the Institution and its members.
- Continue to develop communication means such as Counter-torque, e-mail and the web site to assist in keeping members well informed.
- Develop a strategy to attract younger (under 55) members to the committee.

Stephen C Armstrong, CEng FIMechE, PEng, FCGI, CMC Chairman, Central Canada Branch.

Feb 2007