

**COUNTER TORQUE No. 37, Fall 2011**

As members, we are the stakeholders of the Institution which is “of the members, by the members and for the members” and its ‘mantra’, “Improving the World through Engineering”, is a powerful one.

The recent passing of Steve Jobs of Apple, an inspiration to many, and whose technological contribution has impacted the world, especially in how we communicate, in ways that were unimaginable, a relatively few short years ago, made me pause and reflect one of our own legends. George Stephenson, without a doubt considered as Father of Railways, was the founding President 164 years ago, in 1847, of The Institution of Mechanical Engineers, as a “Learned Society”, 20 years before Canada became a country. Stephenson died in 1848, barely a year later, at 67, leaving behind a legacy that has continued to inspire generations of engineers, worldwide. Railways spread globally at an unprecedented pace, unleashing a technological revolution in mass transportation, stretching well beyond the lifetime of Stephenson, and benefitting humankind to an extent that he perhaps never imagined.

A word on the ISB (International Strategy Board), through which The Institution has been vigorously pursuing increasing membership numbers internationally. This strategy may work in some countries, but not so in Canada. Our membership, a vast majority of whom are British professionals who arrived ages ago, and made Canada their new home, shows an aging demographic. With no fresh influx of UK engineers in sight, to retain our membership at current levels is a good outcome; Canadian Engineers obviously find it more attractive to attain a P.Eng status.

Since our reporting in April 2011, we have held several interesting events:

**Technical Lectures**

1. Vision for New Vehicle Concepts

The Speaker, Dr. Christopher Borroni-Bird is currently Director of Advanced Technology Vehicle Concepts at GM and the driving force behind GM’s “Reinvention of the Automobile” program. He presented GM’s award-winning vision for a new automobile era. The cars we drive today follow the same underlying design principles as the Model Ts of a hundred years ago and the tail-finned sedans of fifty years ago, well suited for conveying multiple passengers over long distances at high speeds; but inefficient for providing personal mobility within cities. His futuristic talk described transforming the DNA of the automobile, basing it on electric-drive and wireless communication; lighter, cleaner, and “smart” enough to avoid crashes and traffic jams. The fundamental reinvention of the vehicle is an urgent necessity – to make urban mobility more convenient and sustainable, and to make cities more liveable.

2. Wastewater Treatment, Toronto

The Speaker, Brian Morice, has been an acknowledged expert on Wastewater Treatment for 30 years, with a direct Supervisory role in Plant Operations within the city of Toronto.

He shared his knowledge, right down to the micro-organism level on “how stuff works” at a wastewater treatment plant; “used” water that residents and businesses deposit down drains every day, for example, flushing toilets, taking a shower and running a washing machine, produces wastewater which travels through the sanitary sewer system, a network of underground pipes, to treatment facilities and finally into our Lakes.

## Technical/Social Tours

1. Base Borden Visit, May 2011, Canadian Defence Forces Technical Training facility.



2. The Toronto Railway Heritage Centre, September 2011, The Railway Museum features some very interesting displays, exhibits and tours.



In June 2011, we held our Planning Meeting jointly with other Societies at the Gosling Farm. Year after year, Frank and Jayne Gosling have extended us very warm hospitality to meet not only to discuss business, but also to enjoy a fabulous barbecue with our families. We are very thankful to them.

I want to thank all our committee members for their contribution as volunteers, for their time and commitment to our success. Tony Hamilton and Andrew Smith came on board just last year have been great additions to our team.

I look forward to seeing you at our Christmas Dinner on Friday November 25<sup>th</sup>, our flyer is enclosed.

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Chairman, IMechE-CCB