

FACULTY OF ENGINEERING
50TH ANNIVERSARY GALA
Saturday, October 18, 2008

REMARKS BY DAVID WILKINSON
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CHECK AGAINST DELIVERY

Good evening ladies and gentlemen, honoured guests.

It is great to see so many of you here this evening to help us celebrate the Faculty of Engineering's 50th anniversary.

Fifty years. It's remarkable how quickly time passes. I believe I was in kindergarten in 1958. So what I know of the 1950s really comes second hand ... mainly from what I have read and people I have talked to and, well I'll admit, from television shows such as happy days.

So the images that come to mind when I think of the 1950s are malt shops and drive-in hamburger stands. Jukeboxes and pinball machines. Hula hoops and pogo sticks. Sock hops and rock and roll. Bobby sox and poodle skirts. Beehives and peggy sue bobs. Crew cuts and Brylcreamed hair. There was Ozzie and Harriet and the Ed Sullivan show. And, of course, there were the cars ... De soto, Impala, Rambler, Corvette, Thunderbird and Studebaker, to mention only a few. The fin was in.

On the science and engineering side of things it was an amazing time. The Soviet Union successfully launched Sputnik 3 in 1958. And the first American satellite, Explorer 1, was launched into orbit that year, marking the start of what has become known as the space race. Canada's avro arrow made its debut flight in 1958. In fact, the word aerospace was coined that year, from the words aircraft (aero) and spacecraft (space).

Other achievements of 1958 include the sale of the first stereo records, the first colour video recording on magnetic tape, and the completion of the first welded aluminium girder highway

bridge in Urbandale, Iowa. Later that year, the newly formed national aeronautics and space administration, better known as NASA, launched Pioneer One, and Pan-Am flew the first transatlantic jet trip from New York to Paris.

While it was an amazing time it was also a period of transition and change, much like today.

Lifestyles began to change at the end of the 1950s. The rock and roll of Buddy Holly and Elvis Presley was replacing the crooners such as Perry Como and Frank Sinatra. Today, music is changing again from pop to hip hop to rap to new age. Clothing styles have changed and our language is changing too. Groovy has been replaced with awesome and radio has been replaced with I-tunes.

Engineering and science are also transitioning. In the 1950s, colour was being added to television and solid-state was starting to replace cathode ray tubes. Electronic calculating devices were just a glint in some engineer's eye. And the computer punch card hadn't even been invented.

Today, telephones are being replaced with cell phones and cell phones with Blackberrys and I-phones. Music is something you play from your pocket. Nanotechnology is providing the ability to create new materials atom by atom. Pacemakers are installed almost as frequently as light bulbs are changed. And even light bulbs have changed. Computing knowledge is now carried around on a stick. Hybrid cars are replacing combustion engines and all electric cars are on the horizon.

The faculty of engineering has changed too and this is something I'd like to talk to you more about later on this evening. But right now, I have the distinct privilege of introducing some very special guests this evening. They are the people who guided the faculty's transition from when it was established in 1958 through to today.

It is a great pleasure for me to be introduce the past dean's of the faculty of engineering. For those of you who are here with us tonight, I ask that you please stand and be recognized when I call your name.

Our very first dean of engineering was Dr. John Hodgins. He was pivotal in establishing the faculty of engineering and served as dean until 1969. One of his legacies at McMaster is the construction of the first engineering building, which was subsequently named in his honour.

Our second dean of engineering was Dr. Les Shemilt, who has been able to join us this evening. Dr. Shemilt presided over the faculty from 1969 to 1979. We are quite fortunate that he has continued to take an ongoing interest in contributing to the faculty. We will hear from Dr. Shemilt later this evening as he recounts some of the history of the faculty.

Following Dr. Shemilt was Dr. John Bandler who has also been able to join us this evening. John served as dean from 1979 to 1981. He also had previously served as chair of the department of electrical and computer engineering.

Dr. John Wade served as acting dean for the faculty on two occasions ... 1975 and 1981. He oversaw faculty business during the periods when a new dean was being selected, often a challenging position taken on in addition to regular duties.

Next, Dr. Art Heidebrecht served as dean from 1981 to 1989. He began the trend of engineering deans moving on to other executive positions within the university. He also served as provost and vice-president academic, interim principal of divinity college, and acting director of the Centre for Continuing Education. Today, in retirement, he is director of the McMaster-Mohawk bachelor of technology partnership.

Dr. Gary Purdy served as the next dean for the faculty and is with us this evening. Gary served as dean from 1989 to 1994. He also had served as chair of the department of materials science and engineering, and associate dean of graduate studies. Currently, he is director of McMaster's Centre for Peace Studies.

Following Gary as dean was Dr. Mamdouh Shoukri, who served from 1994 to 2001. Mamdouh went on to become vice president of research and international affairs at McMaster and, just over a year ago, was appointed president of York University.

Dr. Mo Elbestawi was appointed dean in 2001 and led the faculty until 2007, when he was appointed Vice President of Research and International Affairs at McMaster.

And, most recently, Dr. Peter Smith, who is also with us tonight. Peter stepped in as acting dean after mo left for his current position and before my appointment. Peter also continued to serve as Associate Dean Academic during that time. Since then, he has moved on to the role of Vice President Academic at McMaster.

Together, these nine deans have seen the successful graduation of more than 12,500 undergraduate students and thousands of graduate students over the past 50 years. We thank them for their commitment and many contributions.

I'd also like to acknowledge Phil Wood, who has been able to join us this evening. Many of you know Phil from his days as Associate Dean Academic for the faculty before he moved on to become Associate Vice President (Student Affairs) and dean of students at McMaster. We're very happy you have joined us.

Now it is my pleasure to invite the President and Vice Chancellor of McNaster University to say a few words. Peter George has been very supportive of the faculty of engineering during his tenure as President and Vice Chancellor. He joined McMaster in 1965 and I'm sure has had more than a few encounters with the faculty and its outstanding and inventive students.

Please join me in welcoming Dr. Peter George who was able to join us during this very busy homecoming weekend.

PART 2 (AFTER LES SHEMILT)

Les really put into context the formation of this Faculty and how it has grown and evolved over the past five decades. I would like to take the next few minutes to describe to you where we are looking to take the Faculty in the future.

Since the Faculty of Engineering was officially established in February 1958, it has grown from four departments and a small but enthusiastic cohort of faculty and students to seven departments, 145 faculty, 123 staff, close to 4,000 undergraduate and graduate students, and over 12,000 alumni. We are now the ninth largest Faculty by enrollment of the 46 universities offering engineering programs in Canada. But more than size we are most proud of our innovative approach to education - for example our hallmark 5-year programs of Engineering coupled with Management, Society or International Studies - and we are consistently ranked in the top three in Canada for research intensity.

Some 20 per cent of McMaster Engineering alumni are estimated to live in the City of Hamilton and many more in the Golden Horseshoe region. Another 15 per cent of alumni live and work in 81 countries outside of Canada.

Over the past few years, the Faculty has established three new graduate schools. They are the School of Biomedical Engineering, the School of Computational Engineering and Science, and the School of Engineering Practice, which includes the Centres for Entrepreneurship and Innovation, Engineering and Public Policy, and Engineering Design. I could speak at length about each but perhaps for this evening it is sufficient to say that they are pushing the Faculty forward in the emerging areas of engineering research and education.

Sustainability and alternative energy is another area in which we are growing. As many of you probably already know, we have the strongest nuclear engineering program in Canada, and one of the strongest in the world. Recently, we have also become involved in wind and solar research with some very promising developments. Water and the environment are another strong suit of the Faculty.

Nanotechnology is another growing area for the Faculty. Just yesterday, the new Centre for Electron Microscopy was officially launched. It houses the most powerful electronic microscope in the world and, with the other electron microscopes and facilities available through the Centre, has already made it a major player in the field of nanotechnology and materials research. It is an excellent fit for McMaster, complimenting our strong capabilities in materials science and engineering, the Brockhouse Institute for Materials Research, the McMaster Manufacturing Research Institute, and several other of our research institutes, centres and labs.

Automotive research continues to be a strong area for the Faculty as well. Even with the turmoil in the automotive industry, our research partnerships remain strong. Earlier this year we announced the formation of MacAUTO, an institute which brings together all the automotive-related research across the University.

The Initiative for Automotive Manufacturing Innovation (IAMI), a \$45-million venture with the University of Waterloo, 35 industry partners, and the provincial and federal governments announced last year, is also underway. It is undertaking research into new materials and their manufacture.

IAMI compliments the work of the General Motors of Canada Centre for Automotive Materials and Corrosion. We are looking forward to increasing our collaboration with CANMENT when it relocates to the McMaster Innovation Park.

And innovative research and learning continues in all of our seven departments ... Chemical Engineering, Civil Engineering, Computing and Software, Electrical and Computer Engineering, Engineering Physics, Mechanical Engineering, and Materials Science and Engineering.

I encourage you to meet with the Chairs and faculty members of these Departments tonight, many of whom are here. You may be surprised at some of the leading-edge work they are doing and how it has changed over the years.

Demand for our co-op students, interns and graduates by employers has never been higher. As a result, our Co-op and Career Services office has never been busier.

As the Faculty has grown in students, faculty and programs, the need for space is at an all-time high. And so, next year, we will unveil a new state-of-the-art facility to address this growth.

A new five-storey, 125,000 sq. ft. building will provide a dynamic, inspiring environment — both in design and technology — for continued, future-focused teaching and research. The Engineering Technology Building will form an integral piece of the University's new entry and gateway concept. And we anticipate that the building will meet the LEED Gold standard for environmental design.

But it's what goes on inside that counts. And so the building will:

- Allow for an estimated 45 new faculty members, 280 new graduate students, and provide a home for our 900 first-year undergraduate students.
- Enable expanded programs in emerging areas of research including biomedical engineering and engineering practice
- Provide space for new research initiatives in micro-and nano-systems
- Offer state-of-the-art teaching studios, tutorial rooms, study spaces to enhance the first-year experience.
- And provide a home to our Bachelor of Technology Program, a cooperative venture between Mohawk and McMaster.

The building will create a comfortable place to learn and work, while encouraging multi-disciplinary collaborations leading to the creation of new knowledge and solutions to modern engineering challenges.

I would like to take a moment to recognize that this success is supported by excellent collaborations and support by our industry partners as well as the provincial and federal governments.

It is also thanks to a great many of you, our alumni, who have made very generous contributions over the years. I would like to acknowledge Walter Booth, in particular, who donated \$2 million to the fundraising efforts surrounding the development of the new building.

We look forward to your continued support and engagement with the Faculty in years to come.

And I'd like to take this opportunity to thank the people who made this evening happen. It's been a great chance to get reacquainted and I know I've already met a number of people who I have not seen in years.

I'd like to thank Jay Ingram for providing his services as Master of Ceremonies this evening. Jay received an Honorary Doctor of Science degree from McMaster in 2004 and continues to support the University. He does an amazing job informing us about the latest developments in science and engineering. I know you are very busy with the show and your new book about global warming ... The Daily Planet Book of Cool Ideas: Global Warming and What People are Doing About It. We'll all look forward to reading it.

I'd like to thank Lee Hillman of Hillman Media for editing our introductory video. It is part of the video series developed by our team in Engineering 1 and the Recruitment Office. Many of your children may see it as it tours as part of the Fireball Show.

I'd like to thank LifeTouch Photography for contributing their services this evening. We will all have some great memories from this evening when we look back at the photos taken.

Thank you to Bob Cooper and Geoff Brooks who provided the music for the cocktail reception earlier this evening.

And there are several people who must be thanked for organizing tonight's gala. I know they spent many, many hours on top of their regular jobs to bring us all together and to make sure we had a great time.

Thank you to Carm Vespi, our Manager of Alumni Relations, who many of you have dealt with over the years. Carm will be starting her 33rd year with the Faculty, and knows this place as good as or better than any of us. Thank you Carm.

Thank you to her team in the Alumni office: Linda Coughlin, Rachel Haung and Maria Topalovic who helped to make this evening such a success.

Thank you to Marilyn Patterson and Murlis Cooper for their generous contributions to this evening. Many of you know Marilyn and Murlis, who both worked in the Dean's Office for many years, ensuring things were kept in order.

Thank you to Janet Delsey, the team in the DocuCentre, and Gene Nakonechny for helping to prepare the materials and visuals for tonight's event, and for many of the 50th anniversary celebrations that have occurred during past year.

Thank you to everyone involved in sorting through hundreds of Faculty photos collected over the past five decades to produce the wonderful slide show that we have been watching throughout the evening.

Thank you to all the student volunteers and the Engineering Young Alumni Committee Members who donated their time to help prepare this evening's event.

And thank you to all of our presenters who helped make tonight such a memorable evening in the history of the Faculty of Engineering.