

## IEEE Canada's Industry Relations—A Few Innovations of Our Own

by David G. Michelson

This issue of the *IEEE Canadian Review* is the first with a regular column that focuses on issues of particular interest to industry (and government). It also marks a slight change in direction for IEEE Canada's Industry Relations Committee.

The Industry Relations Committee's traditional mandate has been to devise and implement a communications strategy that makes managers aware they can accrue direct technical and business benefits as well as strengthen their corporate recruitment and retention strategies by supporting or approving: 1) employee membership and participation in IEEE technical activities; 2) company participation in IEEE Standards Association activities related to its products/services; and 3) company sponsorship of IEEE conferences, awards and technical activities.

Starting this year, the Committee has taken on additional roles. These include: 1) leading the development and promotion of best practices for industry relations across IEEE Canada organizational units (OUs); and 2) aligning IEEE Canada's industry relations strategy with that of IEEE Member and Geographic Activities (MGA).

In response, the Industry Relations Committee will undergo important changes in the next few months. First, the Committee will be expanded to include members who serve as their home Section's Industry Liaison Officers. Second, six members-at-large will be appointed based upon their demonstrated interest in industry engagement, and the skills and expertise they can bring to the task. Because our Committee is now directly connected to the IEEE MGA Industry Relations team, we have a unique opportunity to influence IEEE's strategy in this area.

### Benefits of Best Practices

Development of best practices for industry (and government) relations is important because IEEE Canada volunteers at all levels frequently ask industry (and government) to supply presentations and tours to technical chapters, or perhaps provide sponsorship for a major conference or

activity. Many companies will receive several such requests during the course of a year from IEEE Canada OUs.

The Committee's goal is to provide reference material that will help volunteers: 1) appreciate the manager's perspective when requesting support; 2) learn from the experience of IEEE volunteers who have gone before them; and 3) present a consistent face to industry managers. This will help to ensure that managers will respond positively to our ongoing requests for participation, support and sponsorship.

If you are interested in participating in IEEE Canada's Industry Relations Committee either as Section representative or as a member-at-large, please contact me at [dmichelson@ieee.org](mailto:dmichelson@ieee.org); I'd be happy to discuss how you might be able to contribute in this or any other way.

In my next report, I will describe some new initiatives at IEEE MGA that will provide greater support to IEEE volunteers and OUs that seek to engage supporters and sponsors from industry and government.

### About the Author

**David G. Michelson** is with the University of British Columbia, Department of Electrical and Computer Engineering in Vancouver. In addition to his role as Chair of IEEE Canada's Industry Relations Committee, he also serves as a member of the Board of Governors of the IEEE Vehicular Technology Society (and Editor of the IEEE Press Series on Vehicular Technology), Member of the Board of Governors of the IEEE Communications Society (and Director of Education), Member of the IEEE History Committee and Member of the IEEE Canadian Foundation. He can be reached at [dmichelson@ieee.org](mailto:dmichelson@ieee.org)



## The Quarter Inch Drill: The True Meaning of Experience

by Elmer Bourque

This is a true story about a Terry Fox I have known well and a young machinist I did not know.

A young machinist approaches Terry Fox, tool-maker at the New Brunswick Research and Productivity Council, with a quarter inch drill. "Can you sharpen this drill?" the young machinist asked.

Terry Fox was at RPC long before the famous Terry Fox walked across Canada on one leg. This Terry was an Englishman who had a reputation for fine-tuning formula race cars for a win, back home in England. He was approaching retirement and had a lifetime of experience in his work. Terry also had a pronounced shake in his hands and his head was unsteady as he spoke. Like a tremor I suppose.

The young machinist on the other hand was still learning the ropes and as we will see, learned a lot from this experienced toolmaker.

"What sized hole do you want," Terry replied.

"It's a quarter inch drill" the machinist said: "I want a quarter inch hole."

Terry continued: "Oh yes, but what exactly are you doing? Do you need a push fit, a slip fit a friction fit or an interference fit? Exactly what are you doing?"

The machinist told Terry what he was doing and after some deliberation, Terry suggested he needed a hole that was two thousandths of an inch oversize to smoothly accomplish the task at hand. After establishing the metal to be drilled, Terry went to the grinding wheel and by hand, sharpened the drill with the steadiest hand, and it was done very quickly. One close look at the result and a minute re-adjustment finished the job.

Terry told the machinist to use a certain feed speed on the drill, a certain spindle RPM and also told the young machinist how to cool the tool during the drilling.

After all this, the young machinist thought he better follow the instructions. But to finish the job, he also wanted to see just how good Terry really was. He measured the hole. Sure enough it was not a quarter inch. It was within a tenth of a thousandth of an inch of two thousandths over a quarter of an inch. (0.252±0.0001")

*Elmer Bourque (LSMIEEE) is currently associated with Kestrel Power Engineering of Toronto as a senior engineer. Following graduation he developed numerical control software for the New Brunswick Research and Productivity Council. In 1974, he joined New Brunswick Power where he worked for 31 years as a system performance engineer responsible for power system stability and proper control by commissioning and maintaining fault recording equipment, area generation control, generator excitation, stabilizers, and governor systems. He is recipient of the 2012 IEEE Canada J.J. Archambault Eastern Canada Service Medal.*

*N.Ed.*

*In this new Department, we will be sharing the real-life lessons of our readers that only experience can teach. If you have a tale to tell, then target it to our member news editor, Bruce Van-Lane, [vanlane@ieee.org](mailto:vanlane@ieee.org). It can be about your "schooling," or that of a colleague's – all we ask is that it be true!*