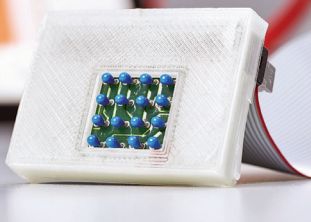


➤ **A group of Canadian** medical and bioengineering undergraduates from McMaster University surpassed more than 1,000 other ideas from around the world to win this year's James Dyson Award for design engineering, [ [www.jamesdysonaward.org](http://www.jamesdysonaward.org) ] worth \$US 40,000, with a device called The sKan. [ [www.jamesdysonaward.org/projects/the-skan](http://www.jamesdysonaward.org/projects/the-skan) ] The McMaster group has developed an early prototype of an inexpensive handheld scanner that holds the possibility of helping doctors diagnose skin cancer in their offices. With further work incorporating the team's planned improvements to the design, future models will have the potential to save lives. "It's a very clever device with the potential to save lives around the world," said James Dyson, himself an inventor. The last Canadian team to win the international Award was Waterloo-based Voltera in 2015 who created a custom circuit board printer that has been launched commercially. Additionally, two University of Toronto students won the competitions' national award for their project "Force-Film: A Digital Sense of Touch for Minimally Invasive Surgery" Force-Film is a thin add-on for minimally invasive surgical instruments that provides surgeons with a digital sense of touch which will help improve surgical safety. There are many success stories of Canadian creativity and innovation. In the opinion



of the author (T. Malkinson) Canada has the talent to be world leaders in innovation. What we lack is the management acumen in, and real understanding of, creativity and innovation to take advantage of our outstanding people. Indeed, this is one of the themes of a recent book by the serial entrepreneur Anthony Lacavera and journalist Kate Fillion, *How We Can Win*, (Penguin Random House, Canada, 2017).

➤ **"Power Up" is the title** of an article in the November, 2017 issue of *The Globe and Mail's Report on Business* [ [www.theglobeandmail.com/business/rob-magazine](http://www.theglobeandmail.com/business/rob-magazine) ]. Ontario's eighteen nuclear reactors provide 60% of its electricity. In 2017, Ontario Power Generation embarked on a 10-year

# Biz-tech Report



by **Terrance Malkinson**

\$12.8B refurbishment of its Darlington Nuclear Generating Station. Of importance is that 96% of the work will be done by local companies, and six of these vendors are profiled in the article. The upgrade is forecast to ensure the safe and clean operation of the reactors that provide electricity for over two million people for the next thirty years.

➤ **Avro Canada was a** Canadian aircraft manufacturing company started in 1945 and within thirteen years became the third-largest company in Canada. Avro Canada was best known for the highly advanced CF-105 Arrow aircraft. This was an advanced, supersonic, twin-engine, all-weather interceptor jet aircraft developed by A.V. Roe of Canada at the site of the present-day Pearson International Airport. Work started in 1949, advancing until the Diefenbaker government's controversial cancellation of the project in 1959. Following the cancellation of the CF-105 Arrow the company ceased operations in 1962. All plans and prototypes were destroyed by order of the government. Many Canadians were upset by the loss of Canada's aircraft industry, what could have been, and the resulting migration of scientists and engineers to other countries. There was a loss of more than 14,000 jobs. Indeed, many of the soon-recruited aerospace engineers helped NASA and its US contractors in their space program. Recently, (summer 2017) a test model used in the program was found on the bottom of Lake Ontario and it is believed that there may be

eight others located in the lake. The plan is to very carefully recover this discovery, stabilize it, and display it in one of Canada's national museums.



➤ **Financial Post Magazine**

[ [www.business.financialpost.com](http://www.business.financialpost.com) ] has named its selection of Canada's Outstanding CEO of the year. In the November 2017 issue, Sun Life Financial's Dean Connor was named the recipient of this honor. Constant improvement is the mantra for his success and as stated in the profile "each new hire, has to raise the collective bar at least a little." Also provided in this issue is a ranking of the top 100 Canadian CEO's based on their company's return to investors. The October issue of this magazine provides a listing of twenty-five of the most influential people believed to be affecting Canadian business and policymaking. An exclusive profile of the Richardson family who for over 160 years have built a \$9B Western Canadian agricultural heartlands business in Agriculture and Food Processing, Energy, Financial Services and Real Estate is provided in the November, 2017 issue of the *Globe and Mail's Report on Business*.

➤ **Electrical Business** [ [www.ebmag.com](http://www.ebmag.com) ]

announced in its November-December issue the Canadian electrical award winners. These awards acknowledge noteworthy electrical installations and electrical safety champions. Project winners included Tata Steel Concentrator Mill (self-sufficient iron ore concentrator), Maritime Link Submarine Cable (500MW HVDC cable between Newfoundland and Nova Scotia), Shell Scotford Refiners Turnaround (electrical upgrades for a 20% debottleneck project), and the Brockville Railway Tunnel (525-meter pedestrian walkway tunnel). People winners included Ronald Bergeron (writer and practitioner of electrical safety), and Terry Becker (developer of electrical safety standards). Why they received the award and profiles of each of the winners are provided in the article. ■

### About the Author

**Terrance Malkinson** is a communications specialist, business analyst and futurist. His career path includes technical supervisor and medical researcher at the University of Calgary, business proposal manager for the General Electric Company, and research administrator with the School of Health and Public Safety at SAIT Polytechnic in Calgary. He is currently an international correspondent for *IEEE-USA Today's Engineer*, contributing editor for *IEEE Canadian Review*, and a member of the editorial advisory board of *IEEE The Institute*. He was Vice-Chair of the IEEE-USA Communications Committee (2004-2010), and editor-in-chief of *IEEE-USA Today's Engineer Digest* (2004-2008). He was an elected Governor of the IEEE Engineering Management Society as well as past editor of *IEEE Engineering Management*. He is the author of more than 550 earned publications, and an accomplished triathlete. [malkinst@telus.net](mailto:malkinst@telus.net)