

## VICTOR MILLIGAN (1929-2009)



There are plenty of things to remember about Victor Milligan - as an athlete, an engineer, an entrepreneur and a founder of Golder Associates, a Canadian geotechnical and environmental consultancy that has 7,000 employees in more than 30 countries.

But three things stand out: his role in Roger Bannister's Miracle Mile in Vancouver in 1954; the employee-owned corporate model that he developed as an ambitious and impoverished engineer; and his Irish charm, always kept on the right side of blarney.

Milliganisms are legendary. A decisive and energetic man, who hated dithering, he would invariably close long discussions about the best way to solve an engineering problem with "Just do it," a phrase he was using decades before Nike turned it into an advertising slogan.

His most famous mantra, however, was the punchline for his management theory about the importance of letting employees have a stake in the company. He argued that you would wash and care for a car you owned, but - and here he would crank up the lilt in his voice, rev up the wattage in his twinkle, pause, and ask - "But have you ever seen anybody wash a rental car?" Point taken.

"He was my colleague, my friend and my mentor and I followed him all my life. You couldn't meet a more extraordinary person," said engineer John Seychuk, a founder of Golder Associates and a colleague for more than 50 years.

"He was an excellent engineer and an entrepreneur, but what people will remember is his personal side," said Rick Firlotte, now president of Golder. Initially, Mr. Firlotte was attracted by the technical challenges of Mr. Golder's engineering projects, but he stayed because of the collegial, supportive culture. "He was a natural leader, so people wanted to follow him," he said.

Mr. Milligan was born in the Crumlin Road area of Belfast, Northern Ireland, on Remembrance Day, 1929, the only child of Albert Milligan, a policeman with the Royal Ulster Constabulary and his wife, Margaret. A tall skinny kid with gangly legs and knobby knees, Victor won a place at the Royal Belfast Academical Institution, the first person in his family to get a secondary school education. At Inst, as it was called, a master called out the names of

the new boys and paused after intoning "Milligan, Victor," and enquired about his lack of a middle name.

"I was too poor to have one," was the cheeky response, but, as he later admitted, "I wasn't cheeky for long." Victor was the first scholarship boy to be named head boy of Inst. He found his talent as an athlete when he won the mandatory cross-country run for the junior boys in record time. One of the people who noticed his prowess was Franz Stampfl, the Austrian skier and javelin thrower, who had fled his homeland in 1936, and was on contract to the Northern Ireland government as a track and field coach.

Mr. Stampfl, who would later coach Roger Bannister, persuaded Victor to embrace running and then talked the school into sending some promising boys to compete in the British Public Schools Championships in London in 1948. Victor won his race, becoming the first boy from Northern Ireland to win the mile.

After Inst., he went on scholarship to Queen's University, Belfast, earning a bachelor of science in 1951 in civil engineering and a masters in soil mechanics (now called geotechnics) in 1952, the same year he began working as an assistant engineer at James Williamson and Partners in Glasgow. All the while, he kept on running, winning the Northern Ireland gold medal for the 880 yards in 1950.

An injury kept him out of the Helsinki Olympics, but he was back in form as captain of the Northern Ireland team at the British Empire Games in Vancouver in 1954, where English runner Roger Bannister and his Australian rival John Landy, both of whom had recently run a mile in less than four minutes, met on the track in what was promoted as the miracle mile. Mr. Milligan had come second in a qualifying heat two days earlier, which guaranteed him a place in the final on Aug. 7, before 35,000 spectators, including the Duke of Edinburgh.

In the final lap, Mr. Landry was in the lead, the crowd was roaring, and as he glanced over his left shoulder to spot his English rival, Mr. Bannister unleashed his famous kick and passed him to break the ribbon at 3:58.8. Mr. Milligan, who ran the fastest race of his career, came in fourth with a time of 4:04.8. Fifty years later he told the Vancouver Sun that "we all knew that Bannister and Landry were the titans, and we were the mortals ... but our target was to make a national team ... so we could go out and see the world ... "

By then Mr. Milligan had won a George VI Memorial Scholarship for study abroad, giving him the financial backing to become a research fellow at Purdue University in Indiana, a top engineering school. There, he was so smitten by another student, Mary Ann Pelikan, that he asked her to marry him on their first date. She declined.

Then, on a climbing trip with a friend in the Teton Mountains in Wyoming, he fell on his head, landing, after a drop of at least 75 feet, on loose rocks before tumbling into a snow drift. He suffered a skull fracture, which left him in a coma for several days. When, still partially paralyzed, he opened his eyes and saw Ms. Pelikan sitting by his beside, he proposed again, insisting this was her last chance. Mordant humour aside, she agreed.

The accident ended both his academic and his running careers. He and Ms. Pelikan were married during his long recovery and eventually became the parents of two sons, Jeffrey, born in 1958, and Michael, who arrived two years later.

His wife died of a brain tumour on Mother's Day in 1988.

Two years later he married Adrey (Babs) Morrow, a woman who had like him been born in Belfast. That marriage also ended sadly when she died of multiple myeloma in 2003. Mr. Milligan married for a third time in 2006 when he wed Donna Tigert, a math teacher and long-time family friend.

Postwar Canada was booming, with a huge demand for roads, bridges and other infrastructure. Mr. Milligan went from Purdue to Montreal, where he worked as a technical officer for Imperial Chemical Industries, before shifting to Geocon Ltd. as a district engineer. Soon, he was transferred to Toronto to work on the Don Valley Parkway, and began building his international expertise in banks, dams, bridges and other types of engineering.

And as he worked he talked, especially with colleagues Mr. Seychuk, district soil engineer for Geocon, and Larry Soderman, a geotechnical engineer with the Ontario Department of Highways, about improving engineering standards and founding his own firm.

Mr. Milligan, then 30, and the father of a toddler and an infant, put words into action with Hugh Golder, an English engineer who had immigrated to Canada in 1959 to work as an independent consultant on, among other projects, a proposal to build a fixed link between Prince Edward Island and the mainland - an engineering feat that Golder Associates helped build nearly 40 years later. Mr. Golder had the name, the experience, and the capital to front a company, and Mr. Milligan had the thrust.

Together, they formed H.Q. Golder and Associates in 1960. There were five employees in a two-bedroom apartment at Jane and Bloor Streets in the west end of Toronto, above a branch of the Bank of Nova Scotia.

Originally Mr. Golder had 90 per cent of the shares. He suggested that when he was ready to retire, he would be willing to sell his shares to Mr. Milligan. Of course, by then, if Mr. Milligan worked "his tail off," the shares would be worth considerably more than their initial value of approximately zero. That is when Mr. Milligan came up with his car washing metaphor, based on three premises: People work harder and care more about something they own; young people have time, energy and cutting edge training, but little money; older people want to work less and have a retirement cushion.

So, they agreed that an employee who had passed a peer review process should be invited to be an associate and entitled to buy shares in the company at a good rate, and when that employee reached age 50 (now 55) he or she would sell the shares back to the company at a staggered annual rate, gradually reducing the shares to zero by the company's mandatory retirement age of 65. In that orderly way, succession and ownership would pass from one generation to the next.

As an engineer, Mr. Milligan was both an entrepreneur and a management guru. He believed in the strength of loose bonds and local partnerships, especially with academic engineers, who were interested in testing practical applications of their theoretical models and in finding good jobs for their brightest students.

The firm grew exponentially. Along the way, Mr. Milligan wrote more than 50 technical papers and founded and edited the Canadian Geotechnical Journal.

Following his own model, Mr. Milligan began selling his shares back to the company and retired in 1994 when he turned 65. Golder and engineering were in his blood, however, and he continued to work as a consultant. His final years saw him lauded with several industry and academic awards, including two honorary degrees and several medals.

Early in March, Mr. Milligan and Donna were in Africa visiting Timbuktu and other ancient capitals.

He woke early the day they were supposed to leave Mali for Ghana, complaining of indigestion. Eventually, he fell asleep with his wife sitting in a chair by his bedside. When she tried to rouse him, he didn't respond. Despite the complications and stresses of dealing with his abrupt death in a foreign country, Mrs. Milligan took some solace from her husband's peaceful demise, saying, "If he had to die, that would certainly have been a way of his choosing."

Victor Milligan was born in Belfast, Northern Ireland, on Nov. 11, 1929. He died on March 4, 2009, of an apparent heart attack in Mali, West Africa. Mr. Milligan, who was 79, leaves his wife Donna, sons Jeffrey and Michael, a grandson and his extended family.