

J.I. (JACK) CLARK (1932-2010)

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He saved a floundering C-CORE, once completing a project proposal in four days and winning out against 50 competitors; in private life, he was approachable, mischievous and loved to cook for groups, once roasting a 43-pound turkey.

Jack Clark definitely thought outside the box. In fact, he thought outside all pre-existing structures and strictures.

As but one example, in the early 1990s, while head of C-CORE (Centre for Cold Ocean Resources Engineering), he thought Canada should have a geotechnical centrifuge. "There were some in Canada, typically desktop models," said Charles Randall, the company's current CEO and president. "Jack figured we needed one that would need its own building. He raised the funds, he convinced people, he hired the expertise."

Completed in 1993, C-CORE's centrifuge is one of the largest in the world.

"Jack never thought small, from his person to his intellect to the size of the steaks he would barbeque for you," Randall said. In fact, he said, C-CORE employees often ask themselves: "What's the next Jack-Clark-sized idea?"

Clark died of kidney failure in St. John's on Sept. 4, after five years of dialysis.

"He was a big guy, he lived big," said his friend Robert Oxley. Clark had been to China nine times, and travelled the world from Japan to Holland; there were only a few U.S. states he missed. He also explored diamond mines in the Northwest Territories, walked across high aqueducts in Spain, and camped across Canada.

"As an engineer he was interested in everything," Randall said. "He liked the tough questions."

"I've been so fortunate to have incredibly interesting projects," Clark told *The Independent* in 2005. "The work I did in the 1970s on the Arctic gas pipeline was certainly interesting because we were literally and figuratively breaking new ground. I thought that was going to be

a unique opportunity that would never be repeated, then I got the opportunity to go to C-CORE."

John (always called Jack) Ivor Clark was born Aug. 23, 1932 in Bullocks Corner (pop. 150), now part of Greensville, Ont. His mother was Viola Harkies; his father, William Gilbert Clark. William Clark worked in the family business, the Clark blanket mill, but that closed the year Jack was born. So he became a door-to-door vacuum-cleaner salesman. If the family could hear him whistling as he made his way up the road home at the end of the day they knew he'd made a sale. After about 12 years of marketing vacuums, William Clark found work at Miner Rubber Co. in Granby, Que.

Jack was the youngest of three, with a sister, Ellen, and brother, Gilbert. When he saw his siblings head off to the local two-room schoolhouse, he wanted to go along. He was told he could go if he sat in the back and kept very quiet. This he did, a silent sponge.

One day a school inspector visited and asked the lad to read something aloud. Jack did, there was a pause, and then the inspector took the book and turned it right side up. Jack had listened so carefully he had memorized the passage.

In addition to his strong intellectual curiosity and abilities, he was very athletic. In Granby he worked summers for Munro Construction and played hockey and basketball and took part in field events like shot put and discus. In fact he started his post-secondary education, at Acadia, on a small basketball scholarship. Otherwise he had \$34 in his pocket, and worked part-time as a waiter. After that first year he joined the air force as an ROTP (Regular Officer Training Plan) student. Eventually he earned his BSc (Acadia, 1955), BEng (Nova Scotia Technical College, 1957), MSc (University of Alberta, 1961), and then returned to Nova Scotia Tech for his PhD (1970).

It was at Acadia that Clark met Joan MacDonald. Acadia was then dubbed the matchmaking factory of Atlantic Canada, and diamond ring parties in the young women's dorms, celebrating engagements, were a regular social event. "But I was not interested in getting married," said Joan Clark, a well-known author. Romantic fate intervened. "I literally ran into him. I was racing to biology class. He was coming around the corner with a stack of books and binders on his hip. They went everywhere." If it was not love at first collision, it was something. "I told my roommate, 'I just bumped into the only guy around here I'd be interested in marrying.'"

They wed July 26, 1958, and had three children, Tim, Tony and Sara.

Clark's ROTP commitments saw him take a three-year posting to a RCAF Station, the Mid-Canada Line radar site, in Winisk, on James Bay. He persuaded his bride to set up house in a small dwelling that was hardly even a house, as water had to be hauled from a nearby river.

Winisk had about 100 Cree (who relocated in 1986 to Peawanuck, ON), and a boardwalk with a church at one end and a Hudson's Bay Company store at the other. It was in this isolated place that Clark first studied the harsh environments and ice impacts that would occupy so much of his engineering career.

After that he worked with such companies as R.M. Hardy & Associates and Golder Associates, in Calgary and Edmonton, had a seven-month stint with the federal government

in Ottawa, and then moved to Halifax. Then came C-CORE, and in 1984, the family moved to St. John's.

Clark was now the president and CEO of the floundering company. C-CORE, a separately incorporated entity of Memorial University, was then 10 years old and had been without a head for two years. Revenues were dropping. In his job interview, Clark was told he had six months to turn things around. Someone else might have balked at the challenge, but he relished it.

"He saved it," Randall said. "He saved it and he reinvented it. In its first years it did good science, but there was a culture of research grants, and it was completely tied to the oil and gas industry. When that turned down in the mid-1980s, the contributions went away. It was in a downward spiral."

Under Clark, C-CORE developed an entrepreneurial ethic. His manner and methods were perfect for the company. He had energy and vision. In one instance, he learned of a project opportunity with the European Space Agency, and the fact that the proposal was due in four days did not faze him. Of the 50 submissions, C-CORE's won - and a Newfoundland company was now working in space.

From such measures, C-CORE grew and grew, and that growth continues. It now has offices in St. John's and Ottawa. It provides work-term experience for hundreds of Memorial University engineering, science and business students. It generates \$8-million annually for the university. Its geotechnical centrifuge has an international reputation.

"In the last two years we've worked on every continent on earth, and in space," Randall said. "We've had 50 per cent revenue growth each of the last four years. We've grown from 60 to 80 employees and are about to hit 100."

Clark was also known for his tremendous encouragement of employees. At a Christmas party once, he overheard a technician say that he would like to be an engineer, but it wasn't feasible. "Come to my office on Monday," Clark told the man.

By the end of that meeting Clark was on the phone to the dean of engineering at Lakehead University, insisting that the technician be admitted to the program - which started four days later. After the technician finished that degree, Clark saw that C-CORE sponsored him through a Master's and PhD. And that technician was - Charles Randall, who now holds Clark's former job at C-CORE.

Clark retired from C-CORE in 1997, and was then its principal consultant, an engineering professor at Memorial University, as well as working as a senior principal of Golder Associates, conducting research into the Beaufort Sea oil and gas exploration, underwater structures in the NL offshore, and the Mackenzie Valley gas pipeline.

His CV of appointments, presentations, papers (at least 150) and projects fills 17 pages. And he was editor of *Canadian Geotechnical Journal* (1988-1992).

Among his awards were four honorary doctorates, the R.F. Legget award from the Canadian Geotechnical Society (1983), and the Xerox award for excellence in business-university

research (1991). He was inducted into the Canadian Academy of Engineers in 1992, served with the National Science and Engineering Research Council and was vice-president in 1992-1994, and was on the National Research Council. He received the Order of Canada in 2003, and the Canadian Engineering Gold Medal in 2005. On that occasion, he told The Independent: "It came out of the blue and it's very exciting. But I always think, 'Geez, I know about 30 people more deserving.'"

Approachable, mischievous, and never a tidy person, Clark had an amazing retention for anything he'd read. He was an eclectic music lover, listening to opera, choral music and jazz. He devoured novels. He loved to cook, especially for large groups of students and colleagues, and his biggest Christmas turkey was 43 pounds (the 45-pounder he'd originally ordered died of a heart attack). He made homemade bread and dishes like cod au gratin, and loved to grocery shop, meticulously reading labels (although he always forgot something, and someone would have to make a quick salvage run). Otherwise he hated to shop and would go out Christmas Eve to see what was still open. And he never did dishes.

Clark leaves his wife Joan, children Tim, Tony and Sara, and five grandchildren. A celebration of his life will be held this month.