

Saravanamuttoo, Herbert Ian Howard

June 20, 1933 – October 3, 2021

Birth Location:

Monkton, Scotland

Obituary (online):

Herbert Ian Howard Saravanamuttoo

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https://www.whelanfuneralhome.ca/services_archive.html

<https://www.legacy.com/ca/obituaries/theglobeandmail/name/herbert-saravanamuttoo-obituary?id=40279394>

<https://www.theglobeandmail.com/life/article-gas-turbine-rock-star-herb-saravanamuttoo-had-a-gift-for-teaching/>



SARAVANAMUTTOO, HERBERT IAN HOWARD

June 20, 1933 – October 3, 2021

Herb passed away after a short illness at the age of 88. Predeceased by his beloved wife and best friend of 60 years, Helen (née Buckner), proud father of Colin (Colleen), Malcolm (Dianne) and Neil (Kimberley), even prouder Grandpa of Taylor, Kendall, Callum, Paige and Jemima, and much loved by 12 grand dogs over the years.



Herb was born in Monkton, Scotland near the end of the runway at Prestwick Airport, leading to an early and lifelong interest in airplanes. At the age of six, he could recognize all the British and German planes at the outbreak of World War II. He was a proud graduate of Allan Glen's School – a centre for STEM education long before that term became common – where he was an outstanding pupil and cricketer. He continued his studies at Glasgow University earning a BSc. in Mechanical Engineering with First Class Honours in 1955.

Immediately after graduation, Herb emigrated to Canada to join Orenda Engines in Toronto to work on the Iroquois engine for the Avro Arrow. On 20 February 1959 – a Black Friday – he was one of 14,000 fired over the PA system when the Arrow program was cancelled. He was the first young engineer called back by Orenda and spent another five years there working on CANDU reactor projects and the birth of the Orenda industrial gas turbine programs. In 1964, he accepted a faculty position at the University of Bristol where he worked as a research consultant to Rolls Royce and the British Aircraft Corporation on the development of the Concorde power plant. He obtained his PhD in 1968 and his research, started on the Iroquois, resulted in a major improvement to the Concorde engine.

Herb was invited to join Carleton University in 1970 and returned to Canada with his young family, remaining in Ottawa for the rest of his life. He spent 28 years as a professor at Carleton, including 10 years as Chair of Mechanical and Aerospace Engineering. During his career he maintained strong research contacts with industry on both sides of the Atlantic, however his true love was teaching. He was especially proud of a student assessment which commented, "Tells great jokes!" He would often say he failed Retirement 101, as he continued teaching as a sessional lecturer for 20 plus years, only re-retiring because of his wife's failing health. By this time, he had completed 50 years of teaching at Carleton. He was proud to have introduced the Industrial Experience Program in the Department of Mechanical and Aerospace Engineering in 1988, which eventually led to the co-op program across the university.

He was very active in the engineering profession, particularly with the Canadian Aeronautics and Space Institute and the American Society of Mechanical Engineers. He was President of CASI in 1979 and won the major gas turbine award of the ASME in 2004. In 1974, he was Founding Chairman of the NRC Committee on Industrial Gas Turbines, still going strong in its third incarnation. He was a Founding Director of GasTOPS Ltd. in 1980 and maintained a close association until his retirement. In 1980, he spent a sabbatical year with the Royal Navy in Plymouth with the honorary rank of Captain, R.N. Herb is probably best known for his authorship of Gas Turbine Theory, having first come across it as a student in 1954. After completing his PhD, he joined the original authors in producing a Second Edition with major improvements resulting from his research. He went on to produce further improvements culminating in the Seventh Edition and translation into five languages. Gas Turbine Theory has been in continuous print since 1951, a remarkable record for a technical book.

In 2003, Herb started collaborating with Cranfield University in the U.K., first as an external examiner, and after four years as a lecturer on their industrial courses. This collaboration continued until the end of his days and was a source of great satisfaction.

He was a Fellow of CASI, ASME, IMechE and the Canadian Academy of Engineering. Awards included the Guggenheim Memorial Lecture (2002), the McCurdy Award (CASI, 2005), R. Tom Sawyer Award (ASME, 2004), International Collaboration Award (ISABE, 2008) and most recently the 2019 Award of the International Society for Airbreathing Engines for "His Outstanding Contributions to Airbreathing Engine Technology". Herb and Helen were avid travellers and made it a priority to show their boys the world. There were many family trips to exotic locations, as well as memorable

sabbaticals overseas. Later, Herb and Helen enjoyed finely planned yearly adventures with the grandchildren, exploring much of Canada, while nurturing an interest in the wider world. In later life, Helen and Herb enjoyed hiking in Scotland and New Zealand. At 70, Herb was one of the oldest to walk the Milford Track in New Zealand. They were also proud to walk the West Highland Way – unaccompanied – when Herb was 72, covering 100 miles through the Highlands from Glasgow to Fort William; the map of Scotland shows this is uphill all the way. In the summer of 2021, Herb was nominated for an Order of Canada. Blessed with robust good health and a sharp mind, it was assumed he would be around for another decade or more. It was disappointing that a sudden decline in his health meant a formal decision on the award did not come in time. Referees, colleagues, students and friends agreed he was indeed a great Canadian.

Also in 2021, a further donation to establish the H.I.H. Saravanamuttoo Catalyst Fund at Carleton University resulted in a decision to name the Saravanamuttoo Family Atrium in the new engineering building, currently in the final stages of construction. This, combined with the H.I.H. Saravanamuttoo Gas Turbine Laboratory and the Professor H.I.H. Saravanamuttoo Scholarship in Mechanical and Aerospace Engineering, will cement Herb's legacy at Carleton. A joint celebration of life for Herb and Helen will be held in Ottawa at the National Arts Centre (Canada Room) on Monday, November 1 from 1:00-4:00 pm. The celebration will also be live-streamed. Details are available at saravanamuttoo.remoterespects.ca Due to Covid-19 guidelines on gatherings, any person wishing to attend the service must contact the funeral home to confirm available space and present proof of 2x Vax at the NAC. Arrangements entrusted to The Whelan Funeral Home, tel. 613-233-1488 or info@WhelanFuneralHome.ca. In lieu of flowers, donations to the [Professor H.I.H. Saravanamuttoo Scholarship](#) would be welcomed.

Herb Saravanamuttoo: Husband. Father. Educator. Author. Born June 20, 1933, in Monkton, Scotland; died Oct. 3, 2021, in Ottawa, of natural causes; aged 88.

"Tells great jokes!" read one student's review, and it was a fitting highlight in an academic career that included awards and accolades. Teaching was Herb's calling. Gas turbines were his passion. He was known for happily whistling while walking the engineering building at Carleton University, telegraphing his arrival at a lecture hall. A gifted educator, he brought technology to life in an engaging and entertaining way, mixing real-world lessons with periodic harangues and quotes from Yogi Berra.

He was born in a small village near the end of the runway at Prestwick Airport. It was only natural that Herb developed an early interest in airplanes. At 6, with war looming, he could identify all of them, from Spitfires to Hurricanes to Messerschmitts. In 1955, with a degree in mechanical engineering from Glasgow University, Herb sailed to Canada to join the Avro Arrow Iroquois engine team.

He worked in Toronto, and one evening, Herb and a friend decided to go out to a bar to meet women, and that's just what happened. Helen Buckner was at the bar that night. They were inseparable for the next 60 years.

A dynamic couple, they married in 1960. Herb said the secret to a happy marriage was clear decision-making. Herb made the big decisions and Helen the small ones. This worked swimmingly, although Herb often noted they had yet to require a big decision.

By 1959, Herb was one of 14,000 fired over the PA when the Arrow program was cancelled. But he smuggled out the Iroquois blueprints, later donating them to the Canada Aviation Museum.

In 1964, Herb and Helen returned to the U.K. so he could pursue graduate studies at the University of Bristol. Herb obtained his PhD in 1968, with his research resulting in a major improvement to the Concorde engine. Their sons, Colin, Malcolm and Neil, were born in Bristol.

Education was always a top priority for Herb, but he also introduced his boys to competitive sports. He never missed a game, he taught them how to kick a soccer ball with both feet and – as a keen cricketer – to catch a baseball without a glove. But he would never let them roll down the car windows on hot summer days – ever the engineer, it affected the car's aerodynamics and gas mileage.

In 1970, the young family returned to Canada. Herb and Helen had always planned to come back for Herb's career, but now they also saw more opportunity for the boys. In Ottawa, Herb joined Carleton University and started a five-decade teaching career. The Saravanamuttoo Family Atrium in Carleton's new engineering building will memorialize Herb's remarkable contribution to the university.

An internationally acclaimed gas-turbine authority – a gas-turbine rock star, according to one student – Herb literally wrote the book as the lead author of Gas Turbine Theory, now in its seventh edition and translated into five languages.

Herb was usually the smartest person in the room, but he was also humble and put others at ease. He saw the talent and the good in people, regardless of their status or education. His generosity, loyalty, ethics and endless good humour were equally worthy of recognition. Growing up with strong women, Herb was an early feminist who mentored and championed young female engineers.

He was also an immensely proud grandfather. A favourite activity for his five grandchildren was going to see "Grandpa's engine" at the Aviation Museum.

In early summer 2021, Herb was nominated for an Order of Canada for his contributions to aerospace and powerplant technology and education. Soon after, his health deteriorated suddenly. With his days numbered, he was informed of the nomination. As an immigrant and proud Canadian, he was humbled and moved, but the award didn't come in time. Referees, colleagues, students and friends agreed he was a great Canadian.

Colin Saravanamuttoo is Herb's eldest son.

To submit a Lives Lived: lives@globeandmail.com

Lives Lived celebrates the everyday, extraordinary, unheralded lives of Canadians who have recently passed. To learn how to share the story of a family member or friend, go online to tgam.ca/livesguide

Researched by: Barry Copp (2023)