Remembering Ken Barron A Pioneer of Acoustics in Canada

n December 2022, Ken Barron passed away. He was 89. Through his design work, entrepreneurial vision, and technical innovations, Ken was a pioneer of acoustics in Canada. Notably, alongside Bob Strachan, Ken cofounded Western Canada's first acoustical consultancy, Barron and Strachan, Consulting Engineers in Acoustics, in 1966.

During his 40-year career, Ken worked with and inspired many fellow acousticians, some of whom went on to found their own firms across Canada and the United States. Ken leaves an enduring legacy, one that finds its beginnings at a spare desk in an accountant's office in Vancouver.

The Early Days of Canadian Acoustics

In the 1960s, while working for Hoyles Niblock, a telecommunications consulting firm, Ken and Bob began providing acoustical advice on radio control rooms, schools, and universities, on top of their regular telecommunications design and field work. Within a couple of years, they compiled a library of acoustical texts and a collection of instrumentation for measuring and analyzing noise and vibration.

Word spread about the two acoustical practitioners at Hoyles Niblock, and calls came in from a variety of potential clients, including Dino's Pizza, whose neighbours had complained about Dino's noisy ovens. With his Leo Beranek texts by his side, Ken designed a muffler for the ovens and helped appease the parlour's neighbours.

Hoyles Niblock wanted to send Ken and Bob overseas for telecommunications projects, yet the pair were starting families and preferred to work closer to home. Meanwhile, architects Thompson Berwick and Pratt asked Hoyles Niblock to provide acoustical advice on the UBC Health Sciences Centre. It was the perfect job for Ken and Bob.

Bob's wife, Cheryl, suggested they buy the acoustical practice. In 1966, Barron and Strachan was born, and Canada had its first independent acoustical consulting firm. Ken and Bob paid \$10,000 to Hoyles Niblock over 10 years, interest free. They got the library, instruments, and their first project—the UBC Health Sciences Building. They set up shop in a spare room at their accountant's office, before moving to Heather Street in Vancouver in 1967.

In addition to the UBC Health Sciences Building, Barron and Strachan's early projects included the award-winning Westcoast Transmission Building; a noise survey of the Greater Vancouver Regional District, which informed the development of noise bylaw limits in the surrounding municipalities; and a residential building noise control project that would shape how municipalities in Greater Vancouver addressed the potential effects of noise on proposed developments.



Ken worked with the noise control departments at both the City of Burnaby and City of Vancouver and encouraged them to adopt North American community noise standards. The two municipalities were among the first in Western Canada to include noise control criteria in their residential development bylaws, which governed new residential construction exposed to noise from road and rail traffic, airports, and industry.

Barron and Strachan also advised on office acoustics, and were featured in an article in the July 1968 issue of Office Equipment and Methods about finding the right level of noise at offices to promote health, privacy, and productivity.

In the early 1970s, Barron and Strachan bought a Digital Equipment Corporation PDP8, making them one of the first engineering firms in Vancouver to have an in-house computer. They built analog-to-digital boards to connect their Hewlett-Packard one-third octave band filter set to the PDP8 and Bob wrote machine code to create a real-time analyzer that calculated reverberation time, equivalent sound levels, one-third octave band levels, and exceedance levels.

While Bob left the firm in 1975 for post-graduate acoustical studies with Tom Siddon at UBC, Ken continued as the sole principal. In 1988, he merged with Doug Kennedy and Dan Lyzun to form what is today BKL Consultants Ltd.

An Ear for Performance Spaces

Throughout his career, Ken contributed to the design of notable performance spaces in Western Canada. His portfolio included multi-purpose spaces like Unchagah Hall in Dawson Creek, which was acclaimed by the Victoria Symphony, and the Winnipeg Concert Hall.

In 1973 he investigated the acoustics at the Orpheum Theatre in Vancouver and joined the design team that restored the venue, which is now a popular spot for concerts and home to the Vancouver Symphony Orchestra.

Ken and BKL designed new acoustical reflectors for the Queen Elizabeth Theatre, and was commended by the Vice President of the Vancouver Bach Choir in 1990, after the choir performed Gustav Mahler's Symphony No. 8, which



included 650 musicians. The Vancouver Sun's (Michael Scott's) review of the performance said it was "an evening of music to treasure for many years to come."

Acoustical Influence

Ken supported the development of numerous technical innovations for the acoustical consulting industry using inhouse staff and resources, such as Doug Whicker and David Brown's DUCTs mechanical and system noise prediction software, Marcel Rivard and Gordon Hall's portable noise source capable of testing STC 60 partitions (later licensed to Tracoustics as the NS-100) and Sound Beam acoustic flashlight for aligning theatre panels, and John Walsh's (with UBC's Norman Dadoun) Godot room acoustics modelling software, a precursor to modern ray-tracing room acoustics software.

During the 1980s, Ken presented on acoustical measurements at UBC's School of Architecture, demonstra-ting techniques and equipment for students taking professor Chuck Tiers's Architectural Acoustics course. Ken presented in class, welcomed students at his office on field trips, and even loaned out his equipment for student projects.

In 1985, Ken partnered with Transport Canada (J Bertok) to publish a paper in the Canadian Geotechnical Journal (National Research Council Canada) on vibration isolation of building foundations, detailing tests comparing different foundation types for the extension of the Area Control Centre at YVR considering the sensitive electronic equipment inside.

Throughout his career, Ken worked with and inspired many acousticians.

Dan Lyzun worked with Ken as a young acoustician right after graduation and again later, when their firms merged. He said, "Ken took a chance on a recent graduate, and it turned into a successful near 50-year career. I thank Ken for whatever it was he saw in me and for his encouragement along the way."

Michel Morin of MJM Acoustical Consultants also started his career at the firm after Leslie Doelle made the introductions. He really appreciated that Ken put faith in him to take on new responsibilities, pursue new business opportunities, and develop innovative solutions, despite challenging circumstances like the early 1980s economy crash and 20% interest rates.

Doug Kennedy described how Ken helped make the merger between their firms a success.

"It soon became apparent that Ken would be an excellent

business partner," Doug said. "He was very knowledgeable on both technical and management issues and always receptive to discussing new ideas."

BKL and the Legacy of Ken Barron

We thank Ken and Bob for laying the foundation for our firm all those decades ago. As we celebrate Ken's life, we also look ahead and continue to build on his legacy of hard work and passion for acoustics, to a time when acoustics is embraced in all the places we live, work, and play in.

Personal Details

Ken Barron was born in Trail, BC, and grew up there with his family. He graduated with a bachelor of applied science in electrical engineering from UBC in 1956. Before founding Barron and Strachan, Ken worked for Hoyles, Niblock and Associates, operating their acoustical division; Northern Electric Co.; and BC Telephone Company.

Ken was a Professional Engineer licensed to practice in BC, Alberta, Saskatchewan, Manitoba, and Yukon. He was a founding director of Consulting Engineers of British Columbia and a member of the National Council of Acoustical Consultants, the Acoustical Society of America, the Canadian Acoustical Association, the Institute of Noise Control Engineering, and the Association of Consulting Engineers of Canada.

Ken retired in 1997 and moved to Penticton where he enjoyed golf, gardening, cross-country skiing, and Astronomy. In 1999 he met his second wife, Peggy. (Barbara had passed away in 1996)

From the Acoustical Consulting Industry

From all of us at BKL, other firms, or retired, we express our condolences to Ken's family and loved ones. He will be missed.

Thank you to Mark Bliss, David Brown, Doug Kennedy, Dan Lyzun, Michel Morin, Bob Strachan, and Doug Whicker for contributing to this tribute.



Canadian Acoustics / Acoustique canadienne