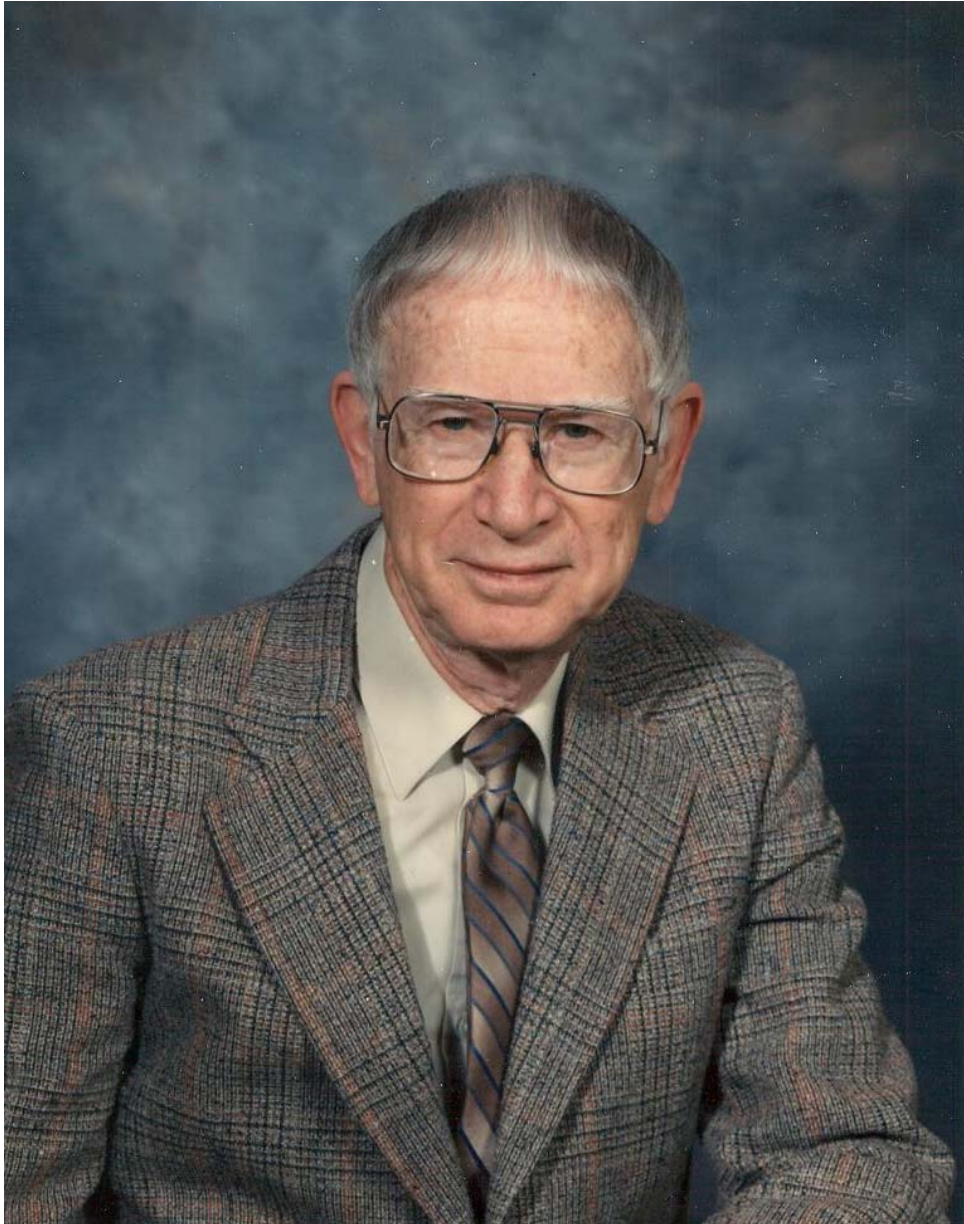


Herbert Spencer Ribner
1913-2005



Professor emeritus Herbert Spencer Ribner, a pioneer in the field of aeroacoustics and jet noise, died May 8 of cancer. He was 92 years old.

Born in Seattle, Wash., Ribner received his bachelor of science from the California Institute of Technology in 1935 and his master's and PhD from Washington University in 1937 and 1939 respectively. Before joining the University of Toronto Institute for Aerospace Studies, Ribner worked for five years at the Lewis Laboratory of the National Advisory Committee for Aeronautics (the predecessor of NASA), which provided advice and carried out much of the cutting-edge research in aeronautics in the U.S. While there he wrote a report on how turbulence passing through a shock wave could be a powerful source of noise. This research was one of Ribner's most outstanding pieces of work, "illustrating beautifully both his physical insight and his talent for using high-level mathematics to solve problems," said University Professor Emeritus Bernard Etkin, a longtime colleague and friend.

In the mid-1950s, around the time the report was published, the institute was beginning to investigate the noise made by jet airplanes and Professor E.J. Richards of Southampton University, a world authority on the subject, was visiting for a few months to help the institute get started. Richards read Ribner's report and went to Cleveland to meet the author. On his return he urged Professor Gordon Patterson, director of the institute, to seize the opportunity to get a high-level scientist onto the staff. Ribner was invited to give a seminar. "I still remember that lecture and his elegant demonstration, on the blackboard of our lecture room, of the elementary spectral component of turbulence and his proof of a basic theorem concerning its properties," Etkin remarked at Ribner's funeral May 14. Soon after, in 1955, Ribner joined the institute as a research associate, becoming a full professor in 1959.

In Toronto Ribner's work focused mainly on the noise made by airplanes, trying to understand and explain the physical mechanisms at work. He tackled the phenomenon of sonic booms and chaired an international panel on what to do about the booms produced by supersonic airplanes. A prolific researcher, Ribner poured out reports on subjects important to the aircraft industry, publishing work on the theory of propellers and wings that was widely used by engineers designing new airplanes.

After his nominal retirement at the age of 65, Ribner's passion for research continued unabated. The paper he considered his masterpiece, one that brought together all the elements of his theories on jet noise and settled some unresolved issues, was published only a few years ago when he was well into his 80s.

"Professor Ribner was an exceptionally talented, distinguished and internationally renowned applied scientist who contributed enormously to the enviable reputation acquired by the University of Toronto Institute of Aerospace Studies," Bernard Etkin said "Herbert Spencer Ribner made his mark on the scientific world. His work will be long remembered, cited and used by those who follow."