

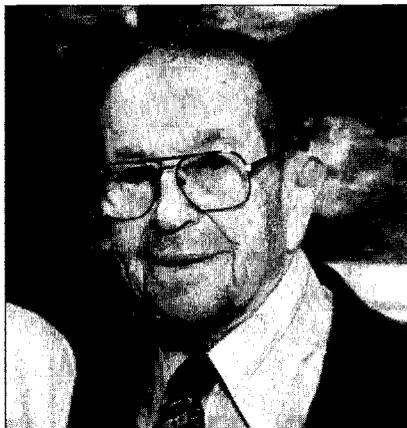
# In Memoriam

**Semi J. Begun**, esteemed AES member, died on January 5, 1995, in Cleveland, Ohio. He is best known for his pioneering work in magnetic recording, underwater acoustics and telecommunications. A man of many talents, Begun contributed to many more areas of endeavor than covered here. His wide range of activities included basic science, technical management and philanthropy.

Begun was born on December 2, 1905, in the Free City of Danzig (now Gdansk, Poland). He received his graduate training at the Berlin Technical Institute, Charlottenburg, Germany, where he was granted a master's degree in communications engineering and a doctorate in electrical engineering in 1933. He joined International Telephone & Telegraph's European operation and advanced to the position of chief engineer at Lorenz A.G., I.T.&T's operating company in Germany. At Lorenz, Begun built his first prototype of a dictating machine based on the concept of magnetic recording on a wire. These devices became very popular throughout Europe in the 1930s.

Immigrating to the United States in 1935, he found that he could not interest the broadcasting companies in his magnetic recording. He accepted a position with Guided Radio, Inc., but continued to work on his magnetic recording at home. While at Guided Radio, he devoted his attention to the development of ship communication systems to help guide passengers to lifeboats in case of fire or other catastrophic events at sea. His system was so effective that the U.S. Navy decided to adopt it. In 1937 he left Guided Radio to form Acoustic Consultants, Inc. It was during his association with this firm that he developed the "Sound Mirror," the first magnetic tape recorder to be commercialized in the U.S.

The Brush Development Company



Semi J. Begun

of Cleveland, Ohio, became interested in several of Begun's inventions and offered him a position in their research and development department in 1938. After the declaration of World War II, Begun turned his attention to the war effort and developed improved magnetic recorders for military aircrafts, underwater acoustic sensors that used piezoelectric crystals and torpedoes implemented with sonar homing devices. Begun was appointed to serve as a member of the National Defense Research Committee under the direction of J. B. Conant and V. Bush. For his contribution to the war effort, he received a presidential citation from President Truman.

At the termination of the war he was appointed vice president, technology, of the Brush Development Company. Begun introduced many new concepts related to new recording media and new uses of magnetic recording. His ideas led to the first demonstration of a video recording head and the forerunner of the floppy disk, which permitted two-sided recording on a coated paper disk called "Mail-A-Voice." He continued as vice president until the company merged in 1952 with the Cleveland Graphite Bronze Company to form the Clevite Corporation. He was made a member of Clevite's board of directors and soon afterward was asked to negotiate the

merger of Clevite and Gould National Battery. After the merger he was appointed vice president of technology and a member of the Gould Corporation Board of Directors. He kept his position until his retirement in 1971 when he founded Auctor Associates, a management consulting company. Begun quickly developed a thriving practice with clients in Cleveland, Pittsburgh and Chicago.

Because Begun was always concerned about the growth of violence in our society, he founded the Society for the Prevention of Violence and Aggression in Children, a national program to teach children alternatives to violence. He also established the Begun Institute for Studies of Violence and Aggression at John Carroll University in Cleveland, Ohio. In both of these endeavors, he received the help and encouragement of his wife, Ruth.

For his contribution to the electroacoustics field, the Audio Engineering Society granted him the Emil Berliner Award in 1956 and the John H. Potts Medal in 1960. He also was inducted into the Ohio Science, Technology and Industry Hall of Fame in 1993.

I first met "Joe" Begun in 1947, when I was a graduate student at Harvard. He was a member of a team from the NDRC that came to visit the Acoustics Laboratory where I was working on my dissertation. I was impressed then by his keen mind and his remarkable ability to come quickly to the solution of knotty technical problems. This was the beginning of a long and warm friendship. It always was a pleasure to visit him in his home and discuss science, business or social issues. The scientific community has lost a brilliant and kind man. We shall miss him.

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