

On August 30, Georg Neumann died. One of the last of the great audio pioneers and inventors, he would have been 78 years old in October. He is survived by his widow Elly; a son, Dr. Ralph Neumann; and a daughter, Ingrid Canetti. But Georg Neumann leaves more than a mourning family. He leaves a great tradition, a great company, and innumerable inventions in audio and other fields.

Georg Neumann was born to a railroad worker's family in Chorin, not far from Berlin in what is now East Germany. He served his apprenticeship at Mix & Genest in Berlin, a company still very active in telephony, and there met several of the people who were later to become colleagues in his own company. A brief employment by AEG Berlin brought him into contact with Eugen Reisz, the man often credited with the development of the first quality carbon microphone. It was in Reisz's company, founded after World War I, that Mr. Neumann began his career in audio, starting with the development of an opto-mechanical method of producing a sound film track by means of optical exposure. The development process resulted in a sound track of differing film hardness which was then played back by a pressure transducer.

Because the microphones used in sound motion pictures were of inferior quality, Mr. Neumann developed a new carbon microphone in which the carbon powder was collected in the chamber of a marble block and covered with a membrane. This was a significant improvement over the carbon granule units then in use. The microphone became known as the Reisz microphone, after the owner of the firm. Mr. Neumann's experiments at the famed cradle of German broadcasting, the Vox-House Berlin, at the end of October, 1923, produced such dramatically improved results that Reisz from then on delivered all of the microphones and amplifiers used by German broadcasters. During this period, Georg Neumann also developed magnetic pick-ups, capacitive loudspeakers and electro-mechanical cutter heads.

In 1928, Georg Neumann, together with Erich Rickmann, founded Georg Neumann & Co. in Berlin, and soon marketed the first commercially-



GEORG NEUMANN

produced condenser microphones.

In spite of the rapid growth of his company, which required much organizational skill, Georg Neumann continued to apply much of his energy to research and development. He was forever looking for new technical solutions to old problems. His countless patents throughout the world testify to his inventive genius. Yet he never let it go at that, but made from these patents technical devices which bore his name. Georg Neumann's disc-cutting lathes and electro-mechanical cutter heads appeared in 1930 and have, to this day, maintained their international standing.

Georg Neumann could never tolerate conjecture when it came to engineering. He had to know—to know exactly. This resulted in a number of unique test methods, some of which also led to the production of test equipment. Among the best-known is the linear motion logarithmic pen recorder, which he invented in the thirties and which for decades was the standard for level recording in laboratories everywhere. His licensing of this patent to General Radio prior to World War II brought this form of recorder into production.

During World War II, the Neumann company's plant was damaged. It was moved to a small village in what is now East Germany, not far from Bayreuth, the Wagner Festival city. The end of the war found the plant at a standstill, and Mr. Neumann devoted his time to research in a totally different area: that of the storage cell. He was moved to a laboratory in Paris, where he invented

and patented the gas-tight nickel cadmium battery which has made space exploration and portable power a reality throughout the world.

The Neumann Company regrouped in Berlin in 1947 and produced the U 47 condenser microphone which significantly changed the sound of recordings. Georg Neumann GmbH has now grown to 230 employees and continues its long tradition in the field of condenser microphones, stereo disk cutting and mixing consoles. The SX-74 stereo cutter head and its predecessor, the SX-68, were the last products of Georg Neumann's genius. They were personally designed and realized by him. In recent years his company, together with Telefunken-Decca (Teldec), developed the cutting equipment for production of the TeD videodisk system, a research project which has already yielded major benefits to audio disk cutting as well.

Georg Neumann was awarded Honorary Membership in the Audio Engineering Society in 1973 and was given the Society's highest award, its Gold Medal, at the European Convention in Zurich last March. His presence there sparked a very emotional standing ovation at the banquet. It was to be his last official function.

Georg Neumann was a man of few words and much action. He radiated an inner peace which made everyone with whom he came in contact admire him. He had practically no enemies. For most of the younger generation he was a legend. How often I have been asked whether there really ever was a man by the name of Georg Neumann, and how humble it made me feel to be able to say that there was such a man indeed and that I had the honor of knowing him well—very well.

Georg Neumann was a great believer in the worth of the individual and the small group. He knew that genius could only exist in a rare single mind and he gave so many the opportunity to develop as individuals both within his company and as his worldwide representatives. The world of audio has lost a great pioneer and a fine human being. It is too bad that so few had the opportunity to meet him in person; but for those who did, it was an unforgettable experience.

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