

ceeded in obtaining with the calcium atomic beam source almost incredible orders of interference in excess of 4.8 million.

A fellow of the American Physical Society and of the Optical Society of America, Prof. Meissner was also a member of the American Association of Physics Teachers.

John G. Tappert, a member of the staff at the US Army Ordnance Frankford Arsenal in Philadelphia since 1935, died on June 12 at the age of 53. Dr. Tappert was born in Meriden, Conn., did his undergraduate work at Temple University, and received his PhD in physics from the University of Pennsylvania in 1938. Except for a two-year period of self-employment as a consulting engineer, his professional affiliation was entirely with the Frankford Arsenal, where most recently he had been a member of a Long-Range Technical Forecasting Panel which evaluates original ideas submitted by employees and promotes the development of those found to have value.

Dr. Tappert was the inventor of many instruments for the control of artillery fire, including several automatic computers for antiaircraft guns. In 1945, he was sent to Europe by the US Army Ordnance Department as a technical scout to evaluate captured equipment, manufacturing plants, research laboratories, and scientific personnel. He was a member of the American Physical Society.

Russell H. Varian, president of Varian Associates, and co-inventor of the klystron radio tube, died of a heart attack on July 28, while aboard a cruise ship near Juneau, Alaska. He was 61 years of age. Dr. Varian was born in Washington, D. C., and received his collegiate education at Stanford University, where he was awarded an MA in 1927. He received an honorary doctor of engineering degree from the Polytechnic Institute of Brooklyn in 1943.

After receiving his master's degree, Dr. Varian joined the Humble Oil Company doing geophysical surveys. He left there to work with the Farnsworth Television Corporation, but in 1934 he returned to Stanford to work on the klystron with his brother Sigurd and other members of the Physics Department. In 1950, Dr. Varian and his brother were awarded Wetherill Medals by the Franklin Institute for their part in the invention of the klystron, a high-frequency circuit tube which was used to produce beams for aircraft guidance before the development of radar.

Dr. Varian spent from 1940 to 1946 with the Sperry Gyroscope Company, but returned once more to Stanford, where he stayed until 1948 when he and his brother joined with four others in forming their own company, Varian Associates, with Russell Varian as president. The Palo Alto, Calif., firm manufactures ultra-high-frequency microwave tubes and has subsidiaries in Boston and Summit, N. J.

Dr. Varian was a fellow of the American Physical Society.

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