WILLIAM EARL SHOUPP

1908–1981

BY DONALD C. BURNHAM

WILLIAM E. SHOUPP, a pioneer in the development of nuclear power for naval propulsion and electrical generation and the retired Vice-President for Research of the Westinghouse Electric Corporation, died on November 21, 1981. At the time, he was in his office at the Westinghouse Research Center in Pittsburgh, Pennsylvania, where he had continued to serve as a consultant after his retirement.

Dr. Shoupp was a leader in the technical development of nuclear power. Early in his career he directed work on the world's first industrial atom smasher. He was responsible for the development of the nuclear power plant for the first nuclear-powered submarine—the USS *Nautilus*—for which he won Westinghouse Corporation's highest achievement award, The Order of Merit, in 1953. He was in charge of research and development for the Shippingport Atomic Power Plant, which was the first commercial nuclear power plant in the United States. He provided leadership and inspiration to the entire Westinghouse Electric Research Laboratories which he managed, as Vice-President for Research, from 1962 until his retirement in 1973. He served on numerous government advisory committees and contributed greatly to the work of many professional societies and to the National Academy of Engineering. He was noted for his optimism, his sense of humor, and his ability to inspire the young people in engineering and science to give more of themselves—to do better.

Born October 12, 1908, in Troy, Ohio, he received a Bachelor of

Science degree from Miami University of Ohio in 1931 and master's and doctor's degrees in science from the University of Illinois in 1933 and 1938, respectively. He received honorary Doctor of Science degrees from Miami University and the Indiana Institute of Technology.

Dr. Shoupp had a long and distinguished career with the Westinghouse Electric Corporation. From 1938 until 1943 he was a Research Fellow at the Westinghouse Research Laboratories, where he was Section Head of Electronics and Nuclear Physics. He was the inventor of many nuclear particle detector systems and has been called the father of the industrial nucleonics field because of his developments in nuclear gauging techniques. In 1943 he was made Manager of the Electronics and Nuclear Physics Department. From 1948 to 1954 he served as Director of Research, Director of Development, and Assistant Manager of Development for the Bettis Atomic Power Laboratory where he was in charge of research and development for atomic-powered submarines and the Shippingport Atomic Power Plant. In 1954 he was made Technical Director of the Atomic Power Division of Westinghouse. He directed the research and development and engineering of various commercial atomic power plants, including the Yankee Atomic Electric Plant in Rowe, Massachusetts. In 1961 Dr. Shoupp was appointed Technical Director of the Westinghouse Electric Corporation Astronuclear Laboratory where he was in charge of research and development of space propulsion and life support and associated activities.

In 1962 he was appointed Vice-President for Research in charge of the Research Laboratories of Westinghouse. He was responsible for basic, applied, and developmental research conducted at the Research Laboratories in support of the company's sixty-four manufacturing plants and for various federal agencies. He directed the scientific and engineering activities of more than 700 employees, many of whom are world-renowned authorities in their fields. As Director of one of the pioneering industrial research laboratories of the world, Dr. Shoupp was charged with guiding investigations in disciplines as varied as molecular electronics, magnetohydrodynamics, cryogenics, life sciences, laser research, mechanics, and scores of other scientific and technological areas. In 1973, at the age of sixty-

five, Dr. Shoupp retired from Westinghouse, but he continued to work as a consultant for Westinghouse, the Office of Coal Research, the Electric Power Research Institute, and a number of other organizations interested in energy.

Dr. Shoupp was elected to the National Academy of Engineering in 1967 and was active in Academy affairs for the rest of his life. He was Vice-President of the Academy from 1973 to 1978 and was also Acting President of the Academy from December 1974 until April 1975. He was Chairman of the National Research Council's Marine Board from 1970 to 1974.

He belonged to numerous professional and honor societies; he was a Fellow of the American Society of Mechanical Engineers, the American Nuclear Society, the American Physical Society, and the Institute of Electrical and Electronics Engineers. In 1964 he served as President of the American Nuclear Society and was awarded the Industrial Research Institute Medal in 1973. He was awarded nine patents for inventions ranging from a thickness gauge for rolling mills to a method of measuring neutron intensity. Dr. Shoupp published many scientific papers and articles, most of which addressed the subject of nuclear power. Illustrative of his broad interests are those entitled "Organizing Engineers to Meet the Challenge of New Technology" and "Bringing R&D to the Market Place."

Dr. Shoupp was an engineer and scientist who took great pleasure in the results of his work. He was justifiably proud when the USS *Nautilus* cruised successfully under the North Pole. He was interested in people as well as things, and he even set up a training course for the *Nautilus* crew.

Dr. Shoupp did not limit his interests to engineering and technical matters; he was an excellent tennis player and also had a hobby of fixing watches. When anybody had a watch to fix, Bill was the man to do it. Oftentimes, even as a meeting in his office was in progress, he would sit there studying watch parts through a magnifying glass. He had all the necessary tools in his desk to make the repairs.

Dr. Shoupp had many friends who enjoyed his brilliant engineering and scientific knowledge, his sense of humor, and his interest in people.