

Alvin W. Trivelpiece: AAAS Executive Officer

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ALVIN W. Trivelpiece is succeeding William D. Carey as Executive Officer of the AAAS effective 27 April, as was announced by then Board chairman Gerard Piel at the AAAS meeting in Chicago (*Science*, 20 February, p. 840). The new job follows nearly 6 years of service as director of the Office of Energy Research in the Department of Energy (DOE), an advice-and-consent presidential appointment.

Al Trivelpiece, a fourth-generation Californian, was graduated from the California Polytechnic College in San Luis Obispo in 1953, where he showed such exceptional promise that he was accepted as a graduate student at the California Institute of Technology. In his senior year in college he married Shirley Ann Ross; they have three sons, all of whom have followed their father into science and technology and are now working together in their own company in southern California.

At Caltech, Trivelpiece worked with Roy Gould on guided plasma waves; his doctoral dissertation was later published as a book, *Slow-Wave Propagation in Plasma Waveguides* (San Francisco Press, San Francisco, 1966). Gould described it as "the definitive work on the propagation of plasma waves in finite configurations, as well as one of the first experimental demonstrations of such propagation." Trivelpiece then studied as a Fulbright scholar at the Technical University in Delft, where he did further research on plasmas and acquired a working knowledge of the Dutch language. He later received an appointment to the electrical engineering (EE) faculty of the University of California at Berkeley.

Trivelpiece's 7 years at Berkeley came at a time when the department was expanding rapidly, especially in electromagnetics and physical electronics, the areas led by John Whinnery. It was the long-range plan based on the appointment of bright, young Ph.D.'s such as Trivelpiece that eventually raised the Berkeley EE department from one among the group of major state university

departments to third in the nationwide rankings (after Stanford University and Massachusetts Institute of Technology). Nevertheless, in 1966 he decided to forsake the blue skies of his native California for College Park, Maryland, to join the faculty of the University of Maryland, where he had been offered a full professorship in physics. He was 35 years old.

His academic career at Berkeley and Maryland was exceptionally productive: supervision of 19 doctoral candidates, publication of more than 40 papers, and co-authorship, with Nicholas Krall, of the standard text in the field, *Principles of Plasma Physics* (McGraw-Hill, New York, 1973). The book is still much in demand and has recently been reprinted as a paperback by San Francisco Press (San Francisco, 1986). This impressive career included a Guggenheim fellowship in 1966 and a position as assistant director of research in the Division of Controlled Thermonuclear Research of DOE's predecessor, the U.S. Atomic Energy Commission (AEC) from 1973 to 1975.

Perhaps the University of Maryland's proximity to the nation's capital contributed to Trivelpiece's decision to leave Berkeley, as did the unsettled state of that campus during its stormiest years. He also felt that it was important to contribute to the nation's decision-making process with regard to fusion research, an area in which he thought the Soviet Union was overtaking America. His 2 years at AEC convinced Trivelpiece that he could make such a contribution. However, he had reservations about leaving a scientific career for one strongly oriented toward politics and therefore had not built a "constituency" among politicians.

Steering clear of organized politics meant that he had little chance of being selected for a presidential appointment after the Republican landslide of 1980. By then he had left the Washington, D.C., area and returned to California, where he held the position of vice president for engineering and research of Maxwell Laboratories in San Diego



Lyle Rosbotham

(1976–1978), and then was corporate vice president of Science Applications, Inc., in La Jolla (1978–1981). However, Trivelpiece's scientific record and brief government service outweighed his lack of a political base, and he was offered the DOE job in 1981.

It was—and is—a backbreaking assignment: technical adviser to the secretary of energy on DOE's energy R&D program; responsibility for DOE-funded nonweapons multipurpose laboratories, such as the Oak Ridge National Laboratory, and for the department's energy education and training activities. In addition, the position includes responsibility for basic energy, health, and environmental research, and for projects involving high-energy and nuclear physics and magnetic fusion. At DOE, Trivelpiece served three secretaries of energy, received the Secretary's Award ("in recognition of his outstanding leadership") earlier this year, and administered programs representing some \$1.9 billion, about half of DOE's budget for civilian activities. Outstanding among his achievements was gaining presidential endorsement for the Superconducting Super Collider, a \$4-billion project that is DOE's top priority for fiscal year 1988.

Trivelpiece's staff members are sorry to see him leave DOE. "It's a terrific move for AAAS," said one of them. "He's extraordinarily fair and effective—perfectly loyal to both the people over him and the people under him."

One reason for such judgments is Alvin Trivelpiece's long-standing interest in bolstering science and engineering education in order to provide the nation with experts in these fields—an essential task. It is an interest that fits in well with his new post, especially now that AAAS has embarked on a major science education project.

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