

A handwritten signature in black ink, reading "Ernest A. Small". The signature is written in a cursive style with a long horizontal flourish extending to the right.

ERNEST T. SMERDON

1930–2014

Elected in 1986

“For contributions resulting in more effective use of limited water resources for worldwide food production and resource conservation.”

BY JOHN E. BREEN

ERNEST THOMAS SMERDON, Engineering Dean Emeritus of the University of Arizona and a visionary leader in engineering education as well as in water resource conservation, died on August 11, 2014, at the age of 84.

Ernest, or Ernie as he was generally called, was born in a farm home on January 19, 1930, in Ritchey, a very small village in the Missouri Ozarks. During his formative initial 17 years on the farm in Ritchey, he learned from his parents the value of hard work, honesty, and the importance of always doing one’s best. Throughout his subsequent far-reaching career, colleagues greatly respected Ernie for his emphasis on these virtues. They made him a highly effective leader. In every subsequent office that he occupied, Ernie always kept a painting of the river valley and water-powered grain mill at Ritchey to remind him of the interconnection of water and farming that was to be the great part of his life’s work.

At 17, Ernie enrolled in the Agricultural Engineering Department of the University of Missouri in Columbia, receiving a BS in engineering in 1951. That was an extremely important year in his life. Besides completing his baccalaureate degree, he also married Joanne Duck, who became an active partner in many of his later administrative roles and provided constant support to Ernie throughout his career.

With the Korean War under way in 1951, he accepted a commission in the US Air Force and, after a year of meteorology training at the University of Washington, served as a meteorologist from 1951 to 1955, part of the time stationed in Greenland. His meteorological training expanded his agricultural engineering interest. When he left the Air Force in 1955, he returned to the University of Missouri for graduate school with a major in agricultural engineering and a minor in civil engineering. He conducted extensive laboratory studies in hydraulics and hydrology, receiving an MS in 1956 and a PhD in 1959 with emphasis in water resources and irrigation engineering.

Upon completion of his graduate work, Ernie joined the faculty of Texas A&M University as an associate professor of agricultural engineering. In 1962 he was promoted to professor of agricultural engineering and in 1964 he became a professor of civil engineering and director of the Texas A&M Water Resources Institute. During this period, he was a consultant and panelist for early efforts to develop teaching and research programs in renewable natural resources for both the National Research Council (NRC) and the US Department of Agriculture.

In 1968 he became chair of the Agricultural Engineering Department of the University of Florida. He was assistant dean for research there from 1974 to 1976.

From 1976 to 1982, Ernie was vice chancellor for academic affairs of the University of Texas System. In this demanding position he served on the screening committee for presidents of four campuses including the flagship campus, UT Austin. His colleagues praised him for his vision, diplomacy, and honesty.

In 1982 Dr. Smerdon became professor of civil engineering and director of the Center for Research in Water Resources at the University of Texas at Austin. In 1983 he added a professorship in natural resource policy studies in the LBJ School of Public Affairs. In 1987 he was named the Janet S. Cockrell Centennial Chair in Engineering following his 1986 election to the National Academy of Engineering. While at Texas, he

served on numerous water-related task forces that developed programs for both water quality and quantity throughout the state.

In 1988 Dr. Smerdon made his last academic move when he became vice provost and dean of the College of Engineering and Mines at the University of Arizona in Tucson. In this important leadership role, held until 1997, his attention turned to more global issues in the education of engineers and particularly the career-long education of engineers for lifelong learning. He led efforts to shift education for engineers to a more futuristic mode recognizing the rapid development and changes in the technological fields.

Ernie's emergence as a leading contributor in hydrology and water resources was recognized by the American Geophysical Union, which sponsored his hydrology lectures at 15 prominent universities, and by a number of consultancies for the US Agency for International Development, advising roles for developing nations, and participation in NRC panels on environmental issues.

In 1982 he received the Missouri Honor Award for Distinguished Service in Engineering. In 1989 his landmark contributions to irrigation engineering were recognized by the American Society of Civil Engineers (ASCE) Irrigation and Drainage Division (outstanding journal paper) and Royce J. Tipton Award. Also in 1989 the American Water Resources Association gave him the Icko Iben Award for promoting understanding and communication between disciplines involving water resources. He served as president of the American Society for Engineering Education (ASEE) and of the ASEE Deans of Engineering Committee. In 1994 he was elected a Distinguished Member of ASCE and in 2003 his alma mater, the University of Missouri, awarded him an honorary doctorate of science degree.

Upon retirement from the Arizona deanship, Ernie accepted an assignment as senior education associate in the Engineering Directorship of the National Science Foundation. He also participated in NAE committees such as the Academic Advisory Board, the Committee on Technology Options in a Global

Economy, the Steering Committee for Engineers of 2020, and the Capacity of the US Engineering Research Enterprise.

In recognition of his lifelong devotion to improving engineering education, he was selected to receive the ASCE OPAL Leadership Award for Education in 2008 and in 2006 the Union of Pan American Engineering Society's Golden Vector Award, only the fifth US citizen to be so honored. The University of Arizona named the Ernest T. Smerdon Engineering Academic Center in his honor.

Dr. Smerdon is survived by his loving wife of 63 years, Joanne, and children Tom, Kathy, and Gary. He is also survived by 10 grandchildren, four great-grandchildren, and a sister.

Ernie will not be forgotten by anyone who had the opportunity to know him. Much of his legacy is to be found in the great body of professionals impacted with his infectious leadership. He was truly a hard worker.

