Roy Bainer

1902–1990

Written by Robert A. Kepner and Henry E. Studer
Submitted by the NAE Home Secretary

Roy Bainer was born on a farm near Ottawa, Kansas, in 1902. For several years after graduation from high school he operated a wheat farm in partnership with his father and served as a summertime field service representative for a tractor company. He entered Kansas State University in the fall of 1921, obtaining his B.S. in agricultural engineering in 1926 and an M.S. in 1929. He was instructor and junior agricultural engineer during his last two years at Kansas State. He and Lena Cook were married in 1926.

Roy joined the Agricultural Engineering Department at the University of California (UC), Davis, as assistant professor and assistant agricultural engineer in the experiment station in 1929, and advanced to full professor and agricultural engineer in 1943. He was chairman of the department from 1947 to 1961. His primary interest in teaching and in his research was agricultural mechanization. Among his research accomplishments was the development of a process for segmentation and decortication of sugar beet seed that substantially reduced the need for hand thinning, thereby saving an estimated ten man-hours of labor per acre.

During the years Roy was chairman of the Agricultural Engineering Department, it grew substantially in size and stature and became one of the foremost departments of agricultural engineering in the nation. He, himself, became internationally...
recognized as a leader in agricultural mechanization. He was a coauthor of two widely used engineering textbooks on farm machinery and tractors, and was author or coauthor of more than one hundred technical papers and reports.

For many years the agricultural engineering undergraduate program at Davis was an option under mechanical engineering in the College of Engineering at UC Berkeley, with only a six-week summer field course and the senior year being taken at Davis. In 1962 when the Regents approved the establishment of a College of Engineering on the Davis campus, separate from the college at Berkeley, Roy Bainer became the founding dean of the new college. He served in that capacity until his retirement in 1969. His responsibilities as dean included recruiting of new faculty and seeing that curricula for the programs in the new areas of engineering were developed—duties that required a great deal of time, travel, judgment, patience, and the ability to evaluate and attract potential faculty personnel. During his seven years as dean, sixty-five new engineering faculty were hired and the College of Engineering total enrollment increased from 265 to 1,030. When he retired, the new engineering building, completed in 1966, was named Roy Bainer Hall in his honor.

Roy was a member of the American Society of Agricultural Engineers for sixty-three years. He was advanced to the honorary grade of fellow in 1946. In addition to numerous committee and division responsibilities, he served as president of the national organization in 1956–1957. He was also a fellow of the American Association for the Advancement of Science. He was elected to the National Academy of Engineering in 1965, served as a member of the National Research Council representing the Division of Engineering from 1961 to 1969, and was a life member of the American Society for Engineering Education. He received numerous honorary awards, including honorary doctorates from the University of California in 1969 and from Kansas State University in 1983. He was one of four engineers inducted into Kansas State University's first Hall of Fame in 1989.

Roy's international stature led to his service as a consultant in at least ten countries, beginning in 1945 with a three-month visit to England to help in the mechanization of sugar beet produc
tion, followed by visits to Japan in 1948 and Chile in 1958 regarding various aspects of agricultural mechanization. Included among subsequent consulting assignments were involvement in developing a five-year professional program for agricultural engineering at the Agrarian University of Peru, planning a complete College of Engineering for the Kasetsart University in Thailand, and planning six commodity-oriented research centers in Spain.

Roy died in Davis on January 18, 1990. He is survived by his wife, Lena, and his daughter, LaNelle Bainer. He will be remembered as a man who, characteristically, was enthusiastic about whatever he and his colleagues were doing. He enjoyed people and he encouraged individuals to perform to the best of their capabilities.