



Frankette McClelland

BRAMLETTE McCLELLAND

1920–2010

Elected in 1979

“Pioneering efforts in the practice of geotechnical engineering, and contributions to improvements in the design of ocean structures.”

BY ALAN G. YOUNG

SUBMITTED BY THE NAE HOME SECRETARY

THOMAS BRAMLETTE McCLELLAND, or “Bram” as he preferred to be called, died April 14, 2010, in Houston, at the age of 89. Born December 16, 1920, in Newnan, Georgia, to Chalmer Kirk McClelland and Annie Hibernia McClelland (née Bramlette), he was reared in Fayetteville, Arkansas, where his father was a professor in soil agronomy at the University of Arkansas.

Bram earned his bachelor of science in civil engineering from the University of Arkansas in 1940 and his master’s in civil engineering from Purdue University in 1942. After graduation he relocated to work for the city of Houston on the San Jacinto River Project. He started a new company with a partner in 1946, Greer and McClelland.

In 1955 he founded and was president of McClelland Engineers Inc. From its humble start in Houston the company expanded to 14 offices around the world. Its technical contributions to offshore foundation design practice were a significant factor in the development of marine petroleum resources worldwide.

Bram’s leadership skills attracted senior fellow engineers to join his company—John A. Focht Jr., Robert L. Perkins, and William J. Emrich, and a team of other geotechnical engineering

professionals supported his pioneering efforts to enhance the practice of offshore geotechnical engineering.

The offshore industry's state of knowledge was in its infancy in the areas of offshore engineering geology, site investigation methods, laboratory testing methods appropriate for marine sediments, and analytical methods for foundation design. In the tradition of other early pioneers, Bram brought ingenuity, leadership skills, a zest for knowledge, and determination in the development of simple, logical, and innovative solutions for a wide range of extremely complex offshore problems.

He led ground-breaking efforts in the late 1940s to develop methods for conducting site investigations from a floating vessel in the Gulf of Mexico. He did the first site investigation for offshore pile design in 1947 for the California Co. (Chevron) working from a small temporary platform with a portable drilling rig. Recognizing the importance of high-quality sampling and in situ testing operations, he was a pioneer in promoting and overseeing the development of much of the equipment that improved the state of practice over the past 65 years.

He helped establish the first design practice for offshore piles and other foundation types. His leadership helped motivate oil companies to fund research programs investigating the performance of offshore piles exposed to lateral and axial loading under cyclic and extreme hurricane conditions. The first offshore pile design standard was written with his help and later adopted by the American Petroleum Institute as its recommended guidance for the offshore industry. He worked with the National Science Foundation to establish the Offshore Technology Research Center at Texas A&M University and the University of Texas at Austin.

His contributions to our profession extended over almost five decades, during which he wrote numerous papers, served on many technical committees, and gave lectures to universities and professional societies. He published over 25 papers applicable to offshore geotechnics during the 20 years before his retirement. It is important to emphasize that he had no

interest in simply being published, but that every one of his papers clearly benefits the development of the offshore marine geosciences.

Two papers received coveted awards from the American Society of Civil Engineers (ASCE): “Soil Modulus for Laterally Loaded Piles,” coauthored with Focht, received the James Laurie Prize; and “Problems in Design and Installation of Offshore Piles,” coauthored with Focht and Emrich, received the ASCE State of the Art of Civil Engineering Award. In addition to these awards, he was the Ninth Terzaghi Lecturer in 1972, giving a paper and lecture titled “Design of Deep Penetration Piles for Ocean Structures.”

For his outstanding technical accomplishments, Bram was elected to the National Academy of Engineering in 1979 and became a Distinguished Member of ASCE in 1986. He was designated a Distinguished Engineering Alumnus by Purdue University in 1965, elected to the Engineering Hall of Fame at the University of Arkansas in 1972, and received an honorary doctor of engineering degree from Purdue University in 1984. He received the prestigious Distinguished Achievement Award from the Offshore Technology Conference in both 1986 and 1994.

He was a founding board member of the Association of Soil and Foundation Engineers (ASFE) and a founder and chair of the board of Terra Insurance Company. These two entities helped educate practicing engineers on loss prevention to limit their professional liability exposure and provided liability insurance required to practice engineering in our litigious world. He also served on the Marine Board of the National Research Council, including a term as chair in 1985–1986.

He is credited with bringing the concept of “organizational peer review” to the design profession via ASFE. On October 11, 2005, ASCE recognized Bram and ASFE for their visionary leadership in developing the peer review program, which was celebrating its 25th anniversary. ASCE endorsed *Engineering News Record’s* recognition of this program as one of the 125 most significant construction industry innovations of the prior 125 years. Bram was humbled by the recognition and said, “Of

all the contributions I've tried to make to my profession, peer review has been my proudest accomplishment."

Bram's strong character, ground-breaking efforts, and numerous professional contributions explain why the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) decided to honor him by establishing the Bramlette McClelland Lecture. His commitment to our profession and example of high standards throughout his career were an inspiration to his peers and young engineers who knew him. His pioneering contributions will be honored in the future through the selection of other experts in geotechnical engineering to present the Bramlette McClelland Lecture.

Bram's lack of pretension, devotion to his fellow man, and dedication to our profession were his guideposts and a source of inspiration to all. He was an excellent speaker, writer, educator, artist, visionary, researcher, and, of course, engineer who motivated hundreds of geotechnical engineers to pursue excellence while applying sound, practical approaches to our engineering practice. He possessed an uncanny skill for listening attentively to all people, while motivating them to develop their own solutions to problems that often seemed overwhelming to them.

Bram was a remarkable person with a broad range of interests and hobbies, and he was totally devoted to his family, church, community, and profession. A founding member of Emerson Unitarian Church in Houston, he was president of the board of trustees for several years, and was also active as a leader in the Boy Scouts and other civic and community activities.

Bram is survived by his beloved wife of 60 years, Virginia; their five children—Darcy, Tom, Terry, Jeff, and Martha; and seven grandchildren.

