



Lyman C. Reese

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1917–2009

Elected in 1975

“For contributions in geotechnical engineering and education.”

BY JOHN E. BREEN

LYMON C. REESE, Nasser I. Al-Rashid Chair Emeritus in Civil Engineering at the University of Texas at Austin, and one of the nation’s most influential experts on laterally loaded piles and drilled-shaft foundations, died on September 14, 2009, at the age of 92. He was elected a member of the National Academy of Engineering in 1975 for “contributions in geotechnical engineering and education.”

The journalist Tom Brokaw proposed the term “The Greatest Generation” to describe the generation that grew up during the Great Depression, went on to fight in World War II, and came home to rebuild America into a superpower. Lymon Reese was such a person, par excellence.

Lymon was born on April 27, 1917, in Stanley, Pike County, Arkansas. His father was a “log scaler” for a timber company. After primary education in Murfreesboro, Lymon completed high school in Abilene, Texas. While in high school he worked as a caddy at the Abilene Country Club, where he earned money to help his family and entered into a lifelong love with the game of golf.

Lymon entered Abilene Christian College, but with the financial pressures of the Depression, he had to withdraw to go back to work to help support his family. At Abilene High School he had had an opportunity to learn survey calculations. So he joined survey crews along the Rio Grande Valley and

at a munitions plant in Alabama. Shortly after the Japanese attack on Pearl Harbor, Lymon joined the U.S. Navy Seabees as a chief carpenter's mate (surveyor). At 25 he was one of the youngest chief petty officers in the 66th Naval Construction Battalion. He served in the Aleutian Islands and on Okinawa constructing airfields.

Following World War II, Lymon began civil engineering studies at Rice University, where he lettered on the golf team. He transferred to the University of Texas (UT) and using the G.I. Bill received a B.S. in civil engineering in 1949 and an M.S. in civil engineering in 1950. While at UT he met and married fellow student Eva Lee Jett. Lymon was a spiritual person and met his future wife at church in 1948. After receiving his M.S., he became an assistant professor of civil engineering at Mississippi State University. After a year there, combining G.I. Bill and competitive fellowships, Lymon went to the University of California at Berkeley. He completed his Ph.D. program at Berkeley in 1954, receiving the doctoral degree in 1955. In the fall of 1955 he joined the Texas faculty. Returning to Texas with Eva Lee and their three children, Lymon began 33 years of active service on the UT faculty as teacher, researcher, and administrator. From 1965 to 1972 he was chair of the civil engineering department, and from 1972 to 1979 he was associate dean for research. He held the Nasser I. Al-Rashid Chair from 1981 to 1984. A year after his retirement from UT in 1984, Lymon founded Ensoft, Inc., in Austin, a developer of engineering software. He carried out his worldwide consulting activities through a subsidiary, Lymon C. Reese and Associates.

Although Lymon began his college education at age 29, his widespread survey experience and Seabee "can do" spirit served him well as a firm foundation on which to build an active civil engineering teaching, research, and consulting career. He was a dedicated problem solver, always interested in challenging practical applications for his knowledge. In his early years at UT, he spent summers working with Shell Development Company and quickly became immersed in a host of geotechnical problems connected with offshore

structures. Working closely with his faculty colleague Hudson Matlock, they developed numerous applications of soil-structure interaction with both analytical and experimental breakthroughs. Lymon's pioneering papers on piles laterally loaded with wind and waves were recognized as breakthrough classics by the Offshore Technology Conference. For decades major oil companies and offshore constructors sent their new personnel to a specialty short course on offshore structures developed by Lymon and Hudson at UT.

Around 1965, Dr. Reese's interests began to shift toward development of rational design and construction criteria for axially loaded drilled piers, spawning the very important drilled-shaft construction industry. His comprehensive studies showed the reliability of load transfer by skin friction, reducing reliance on end bearing and belled footings. He clearly tied in the effects of various construction methods on drilled-shaft capacity in a landmark 1999 Federal Highway Administration manual. The entire drilled-shaft industry recognized Lymon as a legend.

While Lymon Reese was always interested in challenging applications of soil-structure interaction and conducted many notable full-scale pile and drilled-shaft load experiments, he always relied on advanced mathematical and computational techniques. In his studies he used many finite difference and finite element solutions. He created user-friendly software for engineers interested in soil-structure interaction computations. The company he founded continues today to be successful, with numerous users spread across the globe.

In recognition of his accomplishments, Lymon received the American Society of Civil Engineers (ASCE) Middlebrooks Award in 1958, was the ASCE Karl Terzaghi Lecturer in 1976, received the ASCE Terzaghi Award in 1983, and was named an ASCE honorary member in 1985. The Offshore Technology Conference recognized him with a Distinguished Achievement Award for Individuals in 1985, and the same year he was named a distinguished graduate of the UT College of Engineering.

Throughout a career in which he supervised over 70 graduate students, authored or coauthored more than 160

journal papers, 280 technical reports, and 4 textbooks and received 3 patents, Lymon provided continuing counsel to his university, his profession, and his former students and coworkers.

Lymon Reese was deeply dedicated to his family and served faithfully as a deacon and a Sunday school teacher at his church. Near the height of his career, his beloved wife had a debilitating and almost fatal condition. Lymon set a great example for all who knew him with the love and determination with which he helped his family nurse her back to a greatly improved quality of life. He deeply loved his family, his children and grandchildren, his golf games, and his country. He was a patriot in the true meaning of the term who looked on his Navy service as a duty and a great opportunity. Just as Lymon Reese greatly influenced his students and his industry colleagues, he left an example of wisdom, dedication, and love for his family. He was preceded in death by his beloved wife Eva Lee in September 2003 and is survived by daughter Sally Reese Melant and her husband Michael Melant, by son John Reese and his wife Judy Reese, by daughter Nancy Reese, and by 11 grandchildren and numerous great-grandchildren.

Lymon Reese will not be forgotten by anyone who had the opportunity to know him. He leaves a large group of former students and colleagues who proudly extend his geotechnical applications.

