



Robert C. Embury Jr.

ROBERT C. EARLOUGHER JR.

1941–2011

Elected in 1996

“For contributions to pressure transient analysis of petroleum reservoirs and for technological management.”

BY R. LYNDON ARSCOTT

ROBERT CHARLES (“BOB”) EARLOUGHER JR. passed away on August 19, 2011, after a long struggle with Lewy body dementia. He wished to be remembered “as an engineer and scientist,” and in 2009 he wrote “wherever you place my remains, my heart remains in the Colorado mountains.”

After graduating from Central High School in Tulsa in 1959, he earned BS, MS, and PhD degrees in petroleum engineering from Stanford University. One of his former professors remembers Bob as “the top student by far in his petroleum engineering class. He intimidated the other students with his work ethic and intelligence.”

In 1966, Bob joined Marathon Oil Company as a research engineer and went on to hold a series of research positions at Marathon’s Petroleum Technology Center in Littleton, Colorado. In 1977 he was appointed manager of the Engineering Department. During his time in the Research Center, he established technical teams to transfer research products and technology to field application. In particular, he formed teams of engineers and technologists to conduct pressure and flow rate measurement tests, including multiwell tests, called interference tests, on a regular basis to improve field performance.

Bob was a recognized expert in well test analysis and authored many important papers on that subject and on reservoir simulation and enhanced oil recovery. In 1977 he authored an SPE monograph, *Advances in Well Test Analysis*, that has sold 40,000 copies and is still used as a textbook in several universities.

After his years at the Marathon Research Center, Bob held operating management positions in Casper, Wyoming, and Bridgeport, Illinois. In 1988 he became coordinating manager for production for Marathon Oil UK, and then manager of its Brae Projects (South Brae, North Brae, Central Brae, East Brae, and West Brae), and was based in London for nearly seven years. The Brae fields offered excellent opportunities for Bob's engineering talent. The East Brae field was the first offshore gas condensate field in the North Sea to be developed by gas cycling for pressure maintenance and improved recovery. The Central Brae project was Marathon's first subsea development.

After returning to Houston he was named vice president, international production, until his retirement in January 2000. During his time with Marathon he also completed a four-month MBA course at Harvard Business School.

Bob was very active in the Society of Petroleum Engineers for more than 35 years. He served on or chaired many SPE national-level committees, and was a national director (1980–1983), distinguished lecturer (1985–1986), and an officer in the Denver and London SPE sections. He was a Registered Professional Engineer in Colorado, Texas, Oklahoma, and California. He authored 28 peer-reviewed publications and has three issued patents. He was the author of more than 30 technical talks and papers.

Bob was awarded the Lester C. Uren Award in 1979 for distinguished achievement in the technology of petroleum engineering and the John Franklin Carll Award in 1990 for distinguished contributions in the application of engineering principles for petroleum development and recovery. In 1996, he was elected to the National Academy of Engineering. In 1997, he was named an honorary member of the SPE, the highest honor SPE presents to an individual. He was a member

of Sigma Xi, the Scientific Research Society of America, Tau Beta Pi, and Phi Beta Kappa. At the SPE Annual Technical Conference in New Orleans in 2009, he was recognized as a "Legend of Production and Operations."

Bob is survived by his wife of 41 years, Evelyn; daughter Katie Konold, her husband Eddie, and cherished granddaughter Charley Rose, of Boulder, Colorado; two sisters, Jan Hawkins and her husband Jim, of San Diego, California, and Anne O'Connell Malinowski and her husband Gene, of Morristown, New Jersey; several nieces and nephews; and five cousins.

Bob's main interest was anything associated with the Colorado mountains: downhill and cross-country skiing in winter and hiking and mountain climbing in the summer. By the mid-1970s he had scaled all of Colorado's 14,000-foot peaks, most of them more than once. Later on, he scaled many of these peaks with Katie. He continued to ski every year in Colorado until 2010.

He will be remembered by his colleagues and friends for his amazing intellect, his dedication to his profession, and his concern for others.