Memorial to John T. McGill
1921–1987

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John Thomas McGill, age 65, died at home in Lakewood, Colorado, on May 1, 1987, of complications from amyotrophic lateral sclerosis (Lou Gehrig's disease). Jack was a distinguished scientist whose professional career in geology with the University of California, Los Angeles (UCLA) and the U.S. Geological Survey spanned 35 years. Professionally, he was particularly admired for the thoroughness and quality of his science. However, Jack was more than a dedicated and superb geologist. He was a quiet, modest, thoughtful, and congenial person who developed many close personal friendships; he had a magnificent sense of humor, which was appreciated by all. His passing is a cause of deep sorrow to his family, his colleagues, and his many friends. Jack leaves Carol, his devoted wife of 44 years; a son, John Allen; a daughter, Marilyn; his mother, Ruth; and a grandson, John Andrew, who is John Allen's son.

Jack, the only son of Allen Lenoir McGill and Ruth Conklin McGill, was born on June 19, 1921, in Memphis, Tennessee. His father, an architect, moved the family to Los Angeles when Jack was less than a year old. Jack's life-long fascination with hillsides undoubtedly was initiated by a steep-but-stable lower slope in the Hollywood Hills. It was there that his father designed and built his dream house, into which the family moved on Jack's sixth birthday.

Jack attended local public schools, and as he grew older, made longer and increasingly scientific excursions into the surrounding hills, returning with samples of flora and fauna as well as rocks and minerals. He often visited an abandoned quarry in a nearby canyon, a "location" used frequently in early Hollywood westerns.

He compiled an outstanding academic record at Hollywood High School and received one of the first University of California, Los Angeles, Alumni Association Freshman Scholarships. When he began his freshman studies at UCLA in 1939, Jack assumed that after two years he would transfer to the University of California, Berkeley, to study engineering. However, he took a geology course in his freshman year that changed his mind and his future, to the benefit of the geologic profession and of countless future professional colleagues.

While he excelled in the classroom, Jack also devoted an enormous amount of energy to extracurricular activities. His senior year was one of remarkable accomplishment: he was Battalion Commander of the UCLA Naval Reserve Officers Training Corps (NROTC); a member of Conning Tower, an NROTC honorary, and of Scabbard and Blade, the Armed Services ROTC honorary; and editor of *The Gyro*, the publication of the NROTC. He received double NROTC awards— first honors in navigation, and a sword for Outstanding Senior. He was also chairman of the UCLA Rally

*The Branch Chiefs, who with John T. McGill, were responsible for the development of the Engineering Geology Branch, U.S. Geological Survey, during the periods 1946–1961, 1962–1964, 1974–1979, and 1979–1983, respectively.

Committee and president of his fraternity, Delta Upsilon. He was elected to Phi Beta Kappa and Sigma Xi (scientific honorary society) and graduated *cum laude* in June 1943, with a major in geology. Jack's success in education was a reflection of his lifelong passion for learning; he was truly a scholar.

At the graduation ceremony, he received his commission as an Ensign in the U.S. Navy; he then donned a graduation gown over his dress whites, replaced his naval cap with a mortar board, and accepted diplomas on behalf of all those eligible for the degree of Bachelor of Arts. One week later, he married Carol Gay, a fellow student who undoubtedly had been another reason for his choosing to stay at UCLA rather than transferring to Berkeley.

After graduation, he served with distinction in the U.S. Navy for 32 months, most of that time on active duty aboard a destroyer in the South Pacific, where he was principally a communications and radar operations officer. His numerous decorations included a "V" for valor and a commendation for his role in the sinking of an enemy submarine. He was in Tokyo Bay during the Japanese surrender ceremony and completed his active naval duty in December 1945. He then joined a Naval Research reserve unit; in 1967, he retired from the Naval reserve as a Captain with more than 20 years of service.

Following separation from active duty, Jack returned to UCLA for graduate study in geology. It was during his postwar years at UCLA that his son, John Allen, and his daughter, Marilyn, were born (in 1947 and 1950, respectively). He completed work on a Master's degree under James Gilluly in 1948 and a Ph.D. degree under W. C. Putnam in 1951. While studying for his graduate degrees, Jack also worked in the front of the classroom, first as a teaching assistant and subsequently as a lecturer. His skills as a teacher brought him heavy enrollments, and his infrequent but highly orchestrated classroom pranks earned him considerable notoriety with the students.

Jack knew from the beginning of his graduate studies that he wanted a lifetime career with the U.S. Geological Survey. He joined the USGS in 1953; at first he worked part time while continuing work on a UCLA research project for the Navy on coastal landforms of the world. In 1954, he began his full-time career with the Survey as Chief of the Los Angeles, California, project.

In 1958, the Los Angeles project enlarged twofold, and Jack's involvement with engineering geology problems peculiar to the Los Angeles basin grew in proportion. Jack became especially expert on the stability of slopes; one of his earliest contributions in this field demonstrated a clear association between the distribution of landslides and the surface configuration of the elevated marine terraces and resultant ground-water drainage that characterized the Pacific Palisades area. These studies were accompanied by still other investigations of the effects of man-made excavations, rainfall intensity, and various other factors relating to slope stability in the Santa Monica Mountains. Jack suggested in the late 1950s that a major objective of the Los Angeles project should be a detailed study of the Baldwin Hills, which contained one of the best Quaternary sections in southern California. These hills were also the site of the Baldwin Hills Reservoir, the later failure of which had a dramatic impact on both this project and several related endeavors.

Jack's demonstrated abilities in planning and supervising research and working with people of widely divergent backgrounds inevitably led him to Denver in 1964 to become the third Chief of the USGS Branch of Engineering Geology. For 10 years, through good times and bad times in the USGS, he supervised the Branch program of research in engineering geology. As Chief of this nationwide Branch, he directly supervised about 30 research projects while maintaining liaisons with other Federal and state agencies and universities. Among his many administrative achievements, he was most proud of greatly strengthening the engineering side of the Branch and of materially improving the associated laboratories, field installations, and mobile facilities. He also fostered topical research studies applicable to siting of nuclear reactors and to volcanic hazards assessment; these continue to pay dividends to the nation. In addition, Jack wrote beautifully; he was a superb technical critic and editor. The many maps and scientific reports that were completed by the Branch during his administration were much improved by his careful and meticulous review. He was admired equally by his supervisors and by those he supervised, for his character, fairness, and integrity.

In August 1974, Jack stepped down as Chief of the Engineering Geology Branch to complete his unfinished landslide research in the Pacific Palisades area of Los Angeles. Just as the first of several planned maps and reports from this research went to press, Teton Dam failed; he was asked to participate in the review of the failure on behalf of the U.S. Department of the Interior. In a period of just a few weeks, Jack assembled the published information on the geology of the area in Idaho adjacent to the dam (an area with which he was technically unfamiliar) and completed the process of assimilating, processing, questioning, and finally synthesizing the complex geology into a relevant engineering-geology framework. His capacity for organizing information and his ability to extract important details from a myriad of data were truly astonishing.

Following the Teton Dam investigation, Jack was able to return again to the unfinished business of the geology of the Pacific Palisades area. By the time of his retirement in 1983, all of his planned maps and reports had been completed, although after retirement he worked voluntarily to ready them for publication. His final products, a geologic map and a map of contours on the wave-cut platforms of marine terraces, both completed at a scale of 1 inch to 400 feet, may well be his finest research achievements. The area contains extremely complicated geology that could only be presented at the large scale Jack used for these maps. When published by the USGS, these two maps will provide a basis for unraveling a part of the complicated coastal geology of southern California.

Particularly during the early years of his career, Jack was very active in professional societies. He was a member and Fellow of the Geological Society of America, and a member of the Association of Engineering Geologists, the International Association of Engineering Geology, the American Geophysical Union, and the Seismological Society of America. His concern for the development of sound pubic policy in the earth sciences led to his early involvement with the fledgling California Association of Engineering Geologists, which in 1963 became the present-day Association of Engineering Geologists. Jack was honored by CAEG with his election as vice-president for the period 1959–1960; he also served as chairman of the Building Code Committee of the Association of Engineering Geologists and as a member of the Teaching Aids Committee of the Engineering Geology Division of the Geological Society of America. His commitment to both the Association of Engineering Geologists and the Engineering Geology Division of the Geological Society of America contributed significantly to the healthy and almost explosive growth of these two groups.

We share the sorrow of Jack's family at his passing. His many friends and colleagues will miss him, as will our profession.

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