Memorial to Robert H. Nesbitt 1906-1990

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Robert Henry Nesbitt died of cancer on October 15, 1990, at Sunnyside Presbyterian Retirement Village in Harrisonburg, Virginia, where he and his wife had resided since 1986. He is also survived by two sons, Hadley Sime Nesbitt of Pennington, New Jersey, and Hugh Miller Nesbitt of Lyndhurst, Virginia.

Bob Nesbitt was born December 19, 1906, in Pathankot, India, to American Presbyterian missionary parents, and he lived in India until his early teenage years. He then came to the United States to attend both high school and Muskingum College in New Concord, Ohio. He received a B.A. degree in geology in 1928. Following this, he studied at Ohio State University and obtained a Master's degree in geology in 1930. Before beginning a 35-year career with the U.S. Army Corps of Engineers, he taught geology and



geography at Allegheny College in Meadville, Pennsylvania for two years and worked as a substitute science teacher in the Quincy, Massachusetts public school system for one year.

Bob Nesbitt began his career in 1934 with the Army Corps of Engineers as staff geologist for the Zanesville, Ohio, office where he was involved with field investigations and reports on 14 dams to be constructed for the Muskingum Conservancy District. In 1935, he became the resident geologist for the Pleasant Hill and Charles Mill Dams in that district, and in 1937 he was transferred to the Pittsburgh district of the corps to be the assistant district geologist of that office. In 1942, Nesbitt was moved and promoted again, this time to Mobile, Alabama, to become district geologist. In this position, he directed the work of other geologists and was responsible for the planning and execution of geological and geophysical investigations and reports involving the design and construction of all civil and military projects within the district.

In 1945, Bob moved to Cincinnati, Ohio, to become the division geologist for the Ohio River Division, one of ten such Corps of Engineers divisions in the United States. In this capacity he provided guidance, consultation, and review for all stages of planning, design, and construction of projects underway in the various districts included in the division. Such projects included major dams, levees, waterways, airfields, hangars, and various types of buildings.

In 1948, after 14 years of successively responsible positions rising from project to district to division geologist, Nesbitt was selected to be assistant to the chief geologist, Geology Branch, Engineering Division, Office of the Chief of Engineers, Washington, D.C. This was a significant honor since there were about 125 geologists in the various corps offices throughout the country.

His new duties were many and varied. They included reviewing the many technical and engineering reports received from across the country, providing representation at field conferences on design and construction projects and serving as an ad hoc member of panels on research and development in the Department of Defense. When the head of the geology branch in the office of the Chief of Engineers retired in 1957, Bob Nesbitt was appointed the new chief geologist.

From 1957 until his retirement in 1969, Bob Nesbitt served as chief of the Geology Branch, Engineering Division, Office of the Chief of Engineers, Department of the Army. He was the principal technical advisor and consultant on engineering geology to all elements of the Corps of Engineers and, periodically, to other government agencies and private concerns on projects within the United States, its territories, and protectorates. Typical areas of activity included site inspections, planning and review of geological and geophysical investigations, review of foundation designs, and inspection of construction and hydro-power structures.

In addition, he had the major responsibility for the overall planning and supervision of research involving engineering geology and rock mechanics in various division laboratories. He also supervised the preparation and editing of engineering manuals, technical engineering letters or regulations, and guide specifications on such varied subjects as geological investigations, foundation drilling and grouting, and matters relating to earthquakes and landslides. Many dams across the country ranging from 50 to 450 feet in height were constructed by the Corps of Engineers during this period of Nesbitt's professional career.

During his long tenure with the Corps of Engineers, Bob enjoyed numerous special activities and assignments. He worked with E. B. Burwell, Jr., the Ray Control Company of Los Angeles, and Glen Small of Engineering Research Associates of St. Paul, Minnesota, on the development of a specialized borehole camera capable of obtaining continuous cylindrical color photography of boreholes. Patent rights were assigned to the Secretary of the Army on March 13, 1956. Another assignment involved the design of combination post-tensionable rock bolt and structural anchors such as those now marketed by several steel manufacturers.

In 1959 he represented the Chief of Engineers on the Army Department Committee for Emergency Construction and Permanent Ground Control following the massive Madison River Canyon earthquake landslide and formation of Quake Lake. In 1964 he served first as the organizing chairman and later as a member of the Interagency Geological Task Force for the emergency evaluation of the March 24 Alaska earthquake. He continued for several months as the Chief of Engineers geologist representative on the board directing remedial and permanent reconstruction activities.

From 1967 to 1969, Bob represented the Chief of Engineers as a geologist member on a special board directing geological and geophysical investigations for sea-level canal studies in Panama and Colombia. Also during this time, Bob served as a member of an interagency panel organized by the U.S. State Department to study and recommend methods and procedures for raising the Abu-Simbel Temple monuments in the Nile Valley, Egypt, to higher elevations before inundation by water impounded by the High Aswan Dam.

In 1945 and 1946 he was guest lecturer at the Department of Geology, University of Cincinnati, and in 1946, 1947, and 1948, he was guest lecturer at the Graduate School of Engineering, Harvard University.

After his retirement from the Corps of Engineers, Nesbitt worked as a self-employed consultant until 1975, specializing in river development projects in Europe, South America, and the Middle East.

Bob was a Fellow of the Geological Society of America and a former chairman of its Engineering Geology Division. He also was a member of the American Association for the Advancement of Science, the U.S. Committee and the International Commission on Large Dams, the Association of Engineering Geologists, the American Geophysical Union, the Geological Society of Washington, and the American Institute of Professional Geologists.

Bob received many honors during his long career, including the Exceptional Civilian Service Award in 1969 from the U.S. Department of the Army, selection to the Gallery of Distinguished Civilian Employees at the Office of the Chief of Engineers, U.S. Army, in 1972, and the Distinguished Service Award from Muskingum College in 1986. He was a registered geolo-

gist and certified engineering geologist in the State of California and a certified professional geologist in the American Institute of Professional Geologists.

Nesbitt was an elder of the Fairlington Presbyterian Church in Alexandria, Virginia, and an active supporter of several world missionary groups.

He wrote and was a co-author of many publications on the investigation and engineering treatment of geological problems in the design and construction of dams, tunnels, navigation structures, bridges and canals, on national and international projects, in addition to many geological appendices of "restricted distribution" documents for the Department of the Army on both civil and military programs.

Bob Nesbitt was a dedicated and personable public servant with a pleasant personality and a great sense of humor. He was and always will be a source of inspiration to all of those with whom he worked for many years.

Note: Most of the information in this memorial was provided by Alan Stone of Fort Myers, Florida.