



*H. D. Nichols*

## KENNETH D.NICHOLS

1907–2000

BY JOHN W.SIMPSON

GENERAL KENNETH DAVID NICHOLS was born in Cleveland, Ohio, in 1907. He entered West Point in 1925 and was graduated fifth in his class of 1929, receiving a B.S. degree.

He reported to Fort Humphreys (now Fort Belvoir), Virginia, on September 13, 1929, as a second lieutenant in the U.S. Corps of Engineers and was assigned to the U.S. Army Engineer Battalion in Nicaragua for survey work on the proposed Nicaraguan Inter-Oceanic Canal. He was awarded the Nicaraguan Medal of Merit for work done after the Managua earthquake in March 1931.

General Nichols attended Cornell University from July 1931 to June 1933 and received the degrees of civil engineer and master of civil engineering. He reported to Vicksburg as assistant director of the U.S. Waterways Experiment Station. This station was engaged primarily in experimental work in conjunction with flood control on the Mississippi River and with river and harbor responsibility of the U.S. Army Corps of Engineers.

In 1932 he married Jacqueline Darrieulat. They had two children, Jacqueline Ann and Kenneth David, Jr.

In 1934 to 1935, on orders from the War Department, General Nichols attended the Technische Hochschule, Charlottenburg, Berlin, Germany, under a fellowship of the Institute of International Education, established for the purpose

of studying European hydraulic research methods. There followed successive tours of duty at Vicksburg; the State University of Iowa, where he received a Ph.D. degree in hydraulic engineering; Fort Belvoir; and West Point, where he served four years as an instructor in the Department of Civil and Military Engineering at the U.S. Military Academy.

After leaving West Point in 1941, General Nichols served as area engineer in charge of construction of the Rome Air Depot, Rome, New York, and the Pennsylvania Ordnance Works at Williamsport.

In July 1942 General Nichols was selected for assignment to a special corps of engineers organization set up in the summer of 1942 by President Franklin D. Roosevelt for developing and producing the atomic bomb. This project became known as the Manhattan Engineer District, and General Nichols was initially assigned as deputy district engineer and subsequently in August 1943, as district engineer. In this capacity, General Nichols supervised the research and development connected with—and the design, construction, and operation of all plants required for—the production of plutonium and uranium-235, including the construction of the towns of Oak Ridge, Tennessee, and Richland, Washington. His office at Oak Ridge became the administrative center of the wartime atomic energy activities. The project involved the expenditure of approximately two billion dollars.

The district engineer to whom General Nichols reported directly was General Leslie R. Groves, commanding general of the Manhattan Project. General Nichols continued to serve with the Manhattan District until the responsibilities for atomic energy were turned over to the United States Atomic Energy Commission in January 1947. At that time, he was appointed professor of mechanics at the United States Military Academy at West Point, New York. Although this was intended to be a permanent appointment, the pressure of atomic energy work first required his service as a consultant to the U.S. delegation to the United Nations Atomic Energy Commission and to the Military Liaison Committee to the U.S. Atomic Energy Commission. Early in 1948, with the increase in international tension, he was relieved from

duty at West Point, promoted to the grade of major general, and assigned as chief of the Armed Forces Special Weapons Project. This project was a joint Army-Navy-Air Force command charged with atomic weapon logistical training responsibilities. He served as chief of this project from 1948 until January 1951. During the same period, he was deputy director for Atomic Energy Matters, Plans, and Operations Division of the general staff of the U.S. Army and was senior army member of the Military Liaison Committee to the U.S. Atomic Energy Commission (AEC).

In the fall of 1950, when Mr. K.T. Keller was appointed director of guided missiles for the Department of Defense, General Nichols was assigned as deputy director of guided missiles and was the principal assistant to Mr. Keller in discharging his responsibilities for advising and assisting the secretary of defense in the research and development and production of Army, Navy, and Air Force guided missiles. He continued to serve with Mr. Keller until the completion of his assignment in September 1953.

In January 1952 the Army reorganized its research and development activities. At that time, General Nichols was appointed chief of research and development, U.S. Army, in addition to his other duties as deputy director of guided missiles.

On October 31, 1953, General Nichols retired from the Army in order to accept appointment as general manager of the U.S. Atomic Energy Commission. During his tenure, the AEC started the nuclear reactor demonstration program, which led to the building of five types of experimental reactors. At this time the AEC was involved in the controversy over J. Robert Oppenheimer, the nuclear physicist who directed the development of the first atomic bomb. Oppenheimer was dropped as a consultant to the AEC and stripped of his security clearance after he was accused of being a security risk. General Nichols resigned from this post in April 1955 and, as a registered professional engineer in the state of Maryland, worked as a consulting engineer in the fields of research and development and commercial atomic power. His consulting firm was retained for various lengths of time by the following organizations: the Aluminum Company of America, the Carborundum Company; Koppers Company, Inc.; Gulf Oil Corporation; Westinghouse Electric Corporation; Detroit Edison

Company; Yankee Atomic Electric Company; Firestone Tire and Rubber Company; Edison Electric Institute; Aerojet-General Corporation; Chas. T. Main; Inca; Panama Canal Company; the U.S. Atomic Energy Commission; Consolidation Coal Company; the U.S. Army Corps of Engineers; and the Electric Power Research Institute. He was an associate of the Overseas Advisory Associates, Inc.

General Nichols was a director of the Detroit Edison Company, Fruehauf Corporation, and Gallery Chemical Company, chairman of the board of Westinghouse International Atomic Power Company Ltd. (Geneva, Switzerland), chairman of the board of Westinghouse Nadge Associates, a director and vice-president of the Army Distaff Foundation, a member of the Secretary of the Army's Scientific Advisory Panel, a member of the Permanent International Commission of the Permanent International Association of Navigation Congresses, a member of the Advisory Board of Directors of the Association of the U.S. Army, and a trustee of the Thomas Alva Edison Foundation. He served as a member-at-large, Division of Engineering and Industrial Research of the National Research Council; as a member of the Advisory Committee on Civil Defense of the National Research Council; as a member of the Project Committee of the National Academy of Engineering; as a member of the Advisory Committee to the Department of Housing and Urban Development of the National Academies of Sciences and Engineering. In the field of nuclear power, he served as a member of the Committee of the Atomic Industrial Forum Study of the Cost and Price Structure for Enriched Uranium. For the Atomic Industrial Forum, he chaired the Study Committee on Uranium Enrichment Services Criteria and Projected Charges in 1965 and the Study Committee on Private Ownership and Operation of Uranium Enrichment Facilities in 1968. He was a member of the Steering Group of the Ad Hoc Senior Management Uranium Enrichment Policy Committee for the Atomic Industrial Forum Uranium, Enrichment Report in 1972.

General Nichols was a member of the National Academy of Engineering and the West Point Society of the District of Columbia, a fellow of the American Nuclear Society, and an honor

ary member of the American Society of Mechanical Engineers. He was awarded the U.S. Distinguished Service Medal (Oak Leaf Cluster), the U.S. Atomic Energy Commission's Distinguished Service Award, the Most Excellent Order of the British Empire (Degree of Commander), and the Collingwood Prize (American Society of Civil Engineers). In 1984 he received the Chiefs of Engineers Award for outstanding public service.

In 1987 General Nichols completed his personal account of how America's nuclear policies were made. His book, entitled *The Road to Trinity*, was published by William Morrow and Company.

In June 1990 General and Mrs. Nichols moved from their farm near Sugar Loaf Mountain, Maryland, where they had lived for more than twenty years. General Nichols died of respiratory failure on February 21, 2000, at the age of ninety-three. At the time of his death, he lived at the Brighton Gardens retirement home in Bethesda, Maryland. Survivors include his wife, Jacqueline, of Bethesda; their daughter, Jacqueline Anne Thompson of Bethesda, and their son, Kenneth David Nichols, Jr., of Olympia, Washington; and four grandchildren, Catherine Anne Nichols, Kenneth David Nichols III, Nicole Therese Thompson, and Anthony J. Thompson, Jr.