

A Biographical Sketch

FREDERICK J. CLARKE

Frederick J. Clarke, Chief of Engineers **from** 1 August 1969 to 31 July 1973, was born of Irish and Dutch ancestry on 1 March 1915 at Little Falls, New York, some two hundred miles north of New York City. His birthplace was notable for its industrial development in the early nineteenth century and its situation on the Erie Canal, though its prosperity had declined markedly by the early twentieth century. His self-educated father worked for the local dairy equipment manufacturer as a machine shop foreman.

Clarke attended a parochial elementary institution and a public secondary school in Little Falls, where he favored technical and mathematical subjects. He worked as a teletype operator for the Western Union Company during high school and for a year afterwards until his entry into the U.S. Military Academy. In 1933, Clarke surpassed a field of some thirty other aspirants in a competitive examination for the appointment to West Point from New York's 33d Congressional District by Representative James W. Wadsworth, Jr. When he graduated from the Military Academy in June 1937, fourth in a class of 298, he received his Bachelor of Science degree and a commission as a regular army second lieutenant.

Three months later, he reported for duty as a company commander with the 5th Engineer Regiment at Fort Belvoir, Virginia. In September 1938, he married Isabel Van Slyke Morrison in the Military Academy chapel at West Point. General and Mrs. Clarke have a son and two daughters.

With two years of troop assignments and schooling, Clarke began a one-year Army sponsored term at Cornell University at Ithaca, New York, in 1939. His study of structural and soil engineering earned him a Master of Science degree in Civil Engineering the next year. He immediately returned to field service at the rank of captain in a burgeoning army with the 15th Engineer Combat Battalion, then assigned to the 9th Infantry Division at

Fort Bragg, North Carolina. Transferring to the 38th Engineer. Regiment (Combat) at Fort Jackson, South Carolina, in June 1941, Clarke participated in the Carolina maneuvers that Fall. After the Japanese attack on Pearl Harbor brought the United States into the war against the Axis powers on 7 December, he was ordered to the Command and General Staff School at Fort Leavenworth, Kansas for an accelerated course. He then took command of a battalion of the 38th Engineers. In February 1942, the unit sailed for Ascension Island, a tiny British Atlantic possession 600 miles south of the Equator. At this outpost, he supervised the construction of an American airfield guarding the approaches to South America and providing one of the many stops on a ferry route across the southern Atlantic to Africa, the Middle East and India.

Six months later, in the midst of this project, new orders suddenly diverted Clarke to his main wartime assignment with the Planning Division of the Headquarters, Army Service Forces. His intensive work in global logistics planning after August 1942 took him to all the American theater commands active during the war, to South America, and to the headquarters of American occupation forces in Germany and Japan. In May 1945, with only eight years of service he was a full colonel with six separate service, campaign, or occupation medals.

Early in 1946, Clarke was assigned as area engineer at Hanford, Washington, for the Army's Manhattan Engineer District which then controlled the design, production, and storage of the nation's atomic weapons. At Hanford, he managed the facility producing plutonium and also dealt with the engineering problems in the town of 25,000 people that had grown up around it. Although the new civilian Atomic Energy Commission absorbed all atomic facilities and functions in January 1947, Clarke remained at the Hanford works until September. At the personal request of Lt. Gen. Leslie R. Groves, the head of the wartime atomic bomb project and now commander of the Armed Forces Special Weapons Project, he then transferred to its Sandia Base at Albuquerque, New Mexico. With this joint service agency, he oversaw the construction of facilities, training programs for atomic weapons assembly crews, and research and development of smaller nuclear devices and their delivery systems.

Posted overseas in November 1949, Clarke arrived in the

Ryukyu Islands the following month as the executive officer of the Okinawa Engineer District under Colonel Warren Underwood and later under Colonel Thomas A. Lane. Occupied by American forces from 1945 to 1972, Okinawa in late 1949 suddenly loomed large in American efforts to establish a formidable western Pacific base network to counteract the newly proclaimed communist People's Republic of China. Clarke was involved in a \$500 million construction program to expand the military facilities on the island. The onset of the Korean war in mid-1950 added to the urgency of the construction but also raised difficulties, since much of the material destined for Okinawa was diverted to the active war zone. By the end of his tour **in February** 1952, Clarke saw the result of much of his labor. From enlarged air installations, the Air Force conducted operations against enemy forces in northern Korea, over 800 miles distant.

After a four-month course at the Armed Forces Staff College at Norfolk, Virginia, Clarke returned to army logistics staff duty as Chief, Atomic Section, Research and Development Division, under the legendary Lt. Gen. Williston B. Palmer, then Assistant Chief of Staff, G-4. Within five-months, Palmer tapped him as his executive officer, a post he held from April 1953 to February 1954, when he left for a three-month advanced management program at the Harvard University School of Business. He then headed the Construction Management Branch, G-4, chiefly concerned with the funding, the manufacture and the emplacement of NIKE missile batteries. He later ran the Production Mobilization Branch with responsibilities for the readiness of the national munitions and armament production lines. Before leaving the G-4 in August 1956, he served as a trouble-shooting Special Assistant to Lt. Gen. Carter B. MacGruder, Palmer's successor. Clarke then attended the National War College before his last major overseas assignment.

In June 1957 Clarke became District Engineer, Trans-East District, with his headquarters at Karachi, Pakistan, a city he had visited during World War II. Established in 1954 to carry out American Mutual Defense Assistance Pact commitments in an area of pronounced neutralist sentiment, the District bore responsibility for American projects across the southern rim of the Asian continent. These involved military and civilian construction work. The larger of the civil projects during Clarke's tour were the Karachi Airport, Dhahran Airport in Saudi Arabia, and

design studies on a motor road from Rangoon to Mandalay in Burma. Military construction programs in Pakistan alone amounted to \$140 million and included construction of U.S. Air Force facilities supporting reconnaissance flights over the western Soviet Union.

After an intervening year's duty as chief of staff of the U.S. Army Engineer Training Center at Fort Leonard Wood, Missouri, Clarke took up an assignment as the Engineer Commissioner for the District of Columbia on 1 August 1960, a post he held until July 1963. One of three commissioners who administered the capital city under a system that was ninety-six years old in 1960, Clarke had a central role in the city's future development. He was a member of eighteen separate planning or executive agencies concerned with sanitation, water-systems, public utilities, zoning, traffic flow, and safety. He frequently represented the city in all these matters before the Congress.

As a member of the National Capital Planning Commission and chairman of the weaker Regional Planning Council, his influence and advice carried beyond the limits of the District of Columbia. He was directly involved in the often controversial planning for the modern, integrated rail and bus system that began serving the national capital area in the mid-1970s as the Washington Metropolitan Area Transit Authority, or Metro. Though the system functioned successfully, events have proved Clarke's frequent criticisms of its financial underpinning prophetic. Among the even more heated issues of his tenure were the highway program that included a freeway leg passing through the poorer southwest and southeast quadrants of the city and proposals for an additional bridge over the Potomac River near Georgetown.

Clarke's experience in Washington reflected the frustrations of a regional planning process that constantly fell afoul of parochial and political interests. Comprehensive designs based on wedges of open space separating highways or rapid transit corridors remained unrealized a decade after his departure from the board. A concentrated attack on the city's water supply problems is still in the future.

In July 1963, General Clarke was installed as Director of Military Construction in the Office of the Chief of Engineers. As director, he oversaw the general planning,

the policy formulation, and the execution of military construction programs for the Army and the Air Force, with the greater part of the latter being concentrated in new intercontinental ballistic missile bases. He was also concerned with all National Aeronautics and Space Administration work at Cape Canaveral, Florida, and elsewhere. Overseas, his directorate extended its sway over \$75 million in contracts in Saudi Arabia and Agency for International Development projects in the Middle East and in Africa. with such far-flung interests, the directorate was highly decentralized; only broad policy decisions were made at the headquarters. This system served well as Clarke's office effectively mounted a disaster relief operation after the devastating Alaskan earthquake of Good Friday 1964 because executive authority lay with a Corps officer on the spot. Clarke received his second star while in this assignment.

For the eighteen months after July 1965, General Clarke held a dual command. He took over the installation at Fort Belvoir, Virginia, and the Engineer School located there. At the outset of the massive American buildup in South Vietnam, Clarke supervised both the field units training on the post and the ten-month educational program that prepared individual officers for battalion command or division level staff work. Shorter basic officer courses turned out platoon leaders, and he re-established an Officer Candidate School to qualify picked enlisted men for commissions and positions of company command.

In December 1966, Lt. Gen. William F. Cassidy, Chief of Engineers, made Clarke Deputy Chief. They had been personally close since their days on planning staffs in Washington during World War II. Clarke shared with Cassidy a common approach to decentralized management. Through Clark's tour as Deputy, the principal problem facing the Corps was the support of Engineer activities in Southeast Asia. He oversaw the continuation and expansion of many programs and innovations to which he had contributed at Fort Belvoir. He helped make decisions on the division of labor among American troops, contractors, and locally hired workers in Vietnam. New complexities of international finance and limited troop strengths further complicated the process as American military engineer forces turned over a growing number of tasks to the Vietnamese in preparation for their own withdrawal from the ill-fated war zone beginning in mid-1969.

following his nomination by President Richard M. Nixon on 3 February 1969 and his subsequent confirmation by the Senate Armed Services Committee, Clarke assumed the post of Chief of Engineers on 1 August. He thus took the helm of the world's largest military and civil engineering organization without having held command in any of the Corps' major civil works divisions or districts within the United States. He applied his usual energies to an engineering program that by 1973 included annual expenditures of up to \$1.8 billion in civil projects and \$1 billion in military construction, primarily for a barracks reconversion program to meet the needs of a projected volunteer army. In addition, the Corps managed a nearly \$600 million construction job to provide the newly chartered U.S. Postal Service with modern bulk mail facilities across the country.

Remarkable among the aspects of Clarke's service as Chief of Engineers was the extent to which he enlarged upon General Cassidy's efforts to attune the Corps of Engineers to the goals of the large and vocal environmental movement of the late 1960s. Taking office only months before the passage of the National Environmental Policy Act, the new Chief actively sought to integrate its spirit into civil works and military construction activities. Amid even incredulous outcry on his own staff, he assembled a committee of the sharpest critics of the Corps from leading environmentally-conscious groups to evaluate the Corps' operations. He further emphasized his concern for environmental safe uards in 1970 by his promulgation of Engineer Regulation 1165-2-500, "Environmental Guidelines for the Civil Works Program of the Corps of Engineers." He began a series of environmental reconnaissance inventories designed to protect the historically, ecologically, and socially valuable sites in any given area, but especially in river basins. Under his influence, the Corps expanded efforts to involve the general public in a region affected by a projected public work in the planning for it.

Clarke's early measures and his constant reiteration of environmental principle within the Corps brought his organization a more than grudging respect from resolute consrrvationists outside it. A landmark legal precedent embodied in Zabel vs. Tabb (1970), handed down during Clarke's tenure as Chief, confirmed the Corps' powers to halt development in wetland areas and coastal marshes. Later in the same year popular conviction and

congressional pressure resulted in new interpretations of the Corps' responsibilities for regulating the dumping of dredged materials or effluents into navigable waterways in the United States and for establishing a permit program under Section 13 of the old Refuse Act of 1899. This and subsequent legislation placed the Corps squarely into regulatory functions that some felt deflected it from usual missions. General Clarke's own foresight, however, carried the Corps a long way toward meeting the enlightened spirit of the times by combining necessary engineering works with new restraints that sought to guarantee the best result for man and nature.

General Clarke's retirement on 1 July 1973 brought to a close a military career of thirty-six years. out of uniform, he continued to reside in the nation's capital and remain active in engineering circles. He became executive director of the National Commission on Water Quality, an advisory body chaired by Nelson A. Rockefeller to examine long-range water policy and pollution abatement programs. He chaired the water policy committee of the American Society of Civil Engineers and has been an active consultant to Tippetts, Abbett, McCarthy, Stratton, Engineers and Architects, of New York and the District of Columbia.