



Hendell Johnson

WENDELL EUGENE JOHNSON

1910-1982

BY JACOB H. DOUMA

WENDELL E. JOHNSON died in Arlington, Virginia, on February 26, 1982. Before his retirement in 1970 he had been Chief of the Civil Works Program of the Army Corps of Engineers for the last ten years of a distinguished thirty-seven years with the Corps. He was recognized universally for competence, leadership, and vision in directing the largest water resource program in history.

Outstanding among his many significant accomplishments during his federal career were his work on (1) development and design of the multiple-use reservoir system in the Missouri River, one of the world's largest water resource developments, costing approximately \$200 million per year; (2) design of the Third Locks Project in Panama and the Atlantic-Pacific Interoceanic Canal Study, involving pioneering in the use of nuclear explosives for canal excavation, a new field of engineering technology; (3) research and development of techniques and criteria for design of massive earth dams on foundation conditions unprecedented in engineering technology; and (4) leadership in fostering worldwide recognition of greater concern for the safety aspects of major dams.

Mr. Johnson was born on September 23, 1910, in Minneapolis, Minnesota, and received a B.S. degree in civil engineering in 1931 from the University of Minnesota. After working briefly with that state's highway department, he joined the Corps of Engineers in 1933 and continued his career with the Corps until retirement, only interrupted by two years of military service during World War II.

To describe Mr. Johnson's responsibilities as Chief of the Engineering Division of the Directorate of Civil Works of the Corps of Engineers, an understanding of that program is required. The program was composed of more than 3,600 authorized projects having a total estimated construction cost of more than \$23 billion and annual expenditures of \$1 billion. It was the major federal program for development of the Nation's water resources, providing many benefits to the American people, such as flood control, navigation improvement, hydroelectric power development, water supply, water quality control, hurricane protection, beach erosion control, and recreation and conservation of land and water resources.

The technical problems—the social, economic, and aesthetic factors that had to be considered—all challenged the engineer executive. He directly supervised sixty top-level engineering specialists and was responsible for providing technical direction for several thousand engineers working throughout the Nation in eleven regional supervisory offices and thirty-seven districts of the Corps of Engineers. In addition, he was responsible for technical direction and review of the work of private firms whose services were required, annual costs being typically \$15 million.

For many years Mr. Johnson represented the United States at international conferences, assemblies of engineering organizations, and advisory boards for major engineering projects. As a federal administrator and engineer, he furnished advice to the Congress on numerous occasions. One example of such service was his work as a consultant to the State Department in connection with the preservation of the Abu Simbel temples in Egypt from inundation by the reservoir behind the high Aswan Dam. He provided advice on the engineering feasibility of the several plans proposed for preservation of the temples, and it was on his advice that the United States made its commitment to participate in the preservation work.

After his retirement from the Corps of Engineers, Mr. Johnson continued as a consultant on major dam projects until he suffered a stroke. With great courage and eagerness he kept informed of ongoing problems and progress on projects with which he was actively involved before his illness, often contributing valuable suggestions by letters dictated to his devoted wife, Margaret, or by telephone.

He also prepared, by dictation, a significant technical paper on construction inspection of dams, which was published by the American Society of Civil Engineers.

In addition to his distinguished service as a federal employee and private consultant, Mr. Johnson served his profession in an exemplary manner through his activities with professional engineering societies. He served in many positions as an officer or committee member of the American Society of Civil Engineers, the International Commission and U.S. Committee on Large Dams (USCOLD), the World Power Conference, and the Society of American Military Engineers. He was Chairman of USCOLD in 1968 and had a major influence in USCOLD actions to promote dam safety, including development of a model law for licensing and inspection of privately owned dams in the United States.

He was recognized by his peers and received a number of honorary awards, including the Department of the Army Exceptional Civil Service Award. He was a Fellow of both the American Society of Civil Engineers and the Society of American Military Engineers and was elected to the National Academy of Engineering in 1970.

Mr. Johnson was a very effective catalyst in human relationships that required the resolution of differing engineering opinions. He was able to conceive of ambitious objectives and to communicate his beliefs and enthusiasm so articulately that there was little doubt about achieving what may have appeared to be unreasonable goals. He inspired people to stretch their capabilities and channel their work into a powerful team effort.

Wendell Johnson was a warm, perceptive man, a true friend of many and admired by all who knew him. It was an inspiration to work with him; younger engineers found his support and encouragement particularly valuable to their career development. His achievements both as a human being and as an engineer leave a rich heritage indeed.