



Walter S. Douglas

Walter Spaulding Douglas

1912–1985

By Thomas Kuesel

Walter Spaulding Douglas, a distinguished engineer of national and international repute, died at the age of seventy-three on March 15, 1985. He and his wife Jeannie had been living in Rhode Island in their home high on a rocky promontory jutting into his beloved ocean waters, where they had enjoyed many happy years of sailing with a host of longtime friends.

On his retirement in 1977 as chairman of the board of Parsons Brinckerhoff Quade & Douglas, the firm to which both he and his father, Walter J. Douglas, had at separate times given the family name, he moved from Plainfield, New Jersey, to his erstwhile summer home in Jamestown, Rhode Island. Douglas had remodeled the house—primarily to accommodate Jeannie's "green thumb" activities—joined the board of the local hospital and the Newport Yacht Club, and set about enjoying life with his family and indulging an interest in boating.

Walter Douglas was born on January 22, 1912, in Cranford, New Jersey. His early education culminated at Phillips Exeter Academy in 1929. He then followed his father into the civil engineering profession and received a B.A. from Dartmouth in 1933 and an M.S. from Harvard in 1935. During those early days, jobs were scarce, but Douglas secured one with the Nashville Bridge Company in Tennessee. He

labored in the company's shops and drafting rooms, detailing steel, in particular, reinforcing bars—some of which he later had to carry on his shoulder in the field, causing him to grumble that he "never should have detailed them so heavy!"

In 1937 Walter Douglas obtained work with the original 1939 New York World's Fair, where he rose rapidly from assistant design engineer to engineer in charge of design. He also became the chief engineer responsible for cost forecasts and for the administrative detail associated with an organization of more than one hundred individuals in various disciplines.

It was there that he became well acquainted with various key people of the Parsons Brinckerhoff firm who were also working on parts of the fair. In 1939 Walter joined Parsons Brinckerhoff. Two years later he was called to active duty in World War II with the Navy's Construction Battalion, the Seabees. Walter Douglas served in battle areas of the Pacific, rose to the rank of lieutenant commander, and later served as acting commander of his battalion. In his future career, he drew assiduously on his wartime experiences as a commander and in construction under difficult conditions.

On his return to civilian life and Parsons Brinckerhoff, Douglas completed a series of engineering and management assignments of ever-increasing scope. Not surprisingly, several of them were of a military nature. He handled the engineering connected with the construction of several of our early postwar military air bases in France and Spain, as well as the key air force bases in Iceland and Newfoundland. These projects were followed by the design and construction of America's first underground bases—first, the so-called Underground Pentagon in the East and, later, the huge North American Air Defense (NORAD) headquarters complex deep in the Rockies.

On the international scene, in addition to his work in Europe for the firm, Douglas obtained and directed far-reaching assignments in South America. For example, in Colombia

and Ecuador he accomplished nationwide comprehensive transportation planning, including the economic and financing studies necessary for its implementation.

Meanwhile, Douglas's business career with Parsons Brinckerhoff continued to progress dramatically. In 1952, at what was then a relatively early age, he had become a partner and a senior vice-president of the firm's Parsons Brinckerhoff Corporation. He soon assumed responsibility for the firm's financial administration, establishing and implementing goals for the firm that kept it advancing in size, capability, and prosperity. The company again included the name Douglas, becoming Parsons Brinckerhoff Quade & Douglas, and Walter finally assumed the positions of senior partner and chairman of the board, which he held until his retirement in 1977.

But before that retirement—in 1953—came BART! Always a profound analyst and innovator, Walter Douglas became the father of the renaissance of metropolitan mass transit. The firm's final report (essentially authored by Douglas, who was a superb writer), "Rapid Transit for the San Francisco Bay Area," became a landmark in the struggle of modern society to resolve its growing problems in moving vast numbers of its people.

The report dealt particularly with urban and suburban environments, areas that had been hampered and engulfed by the proliferation of the private automobile, the consequence of the public's love affair with it as the principal means of transportation. The seeds sown in this early work germinated and grew steadily for the next two decades; they resulted in the actual building of BART, a seventy-five-mile rapid transit system costing about \$1.5 billion—a modern trailblazer in which Douglas again played a key role.

Douglas and his associates were pioneers in applying total systemwide analysis on a large scale, which specifically included the use of areawide land planning. In the resultant restructuring of metropolitan transportation, Walter led the

way for his firm and his profession in many urban and suburban areas including Atlanta, Georgia; Pittsburgh, Pennsylvania; and Caracas, Venezuela.

Nor were all these achievements without well-deserved recognition. In 1969 Walter Douglas was awarded the James Laurie Award of the American Society of Civil Engineers (ASCE), essentially for his outstanding work and leadership in the field of urban transportation. In 1975 he was again honored by ASCE, this time as one of the "Top Ten Construction Men of the Past Half Century"; in 1975 he was honored by the Newcomen Society; and in 1977 he received an award from the National Society of Professional Engineers for "distinguished service to the engineering profession."

In 1967 Walter Douglas was elected to the National Academy of Engineering. Later he received the first award for "Outstanding Service" from the Building Research Board (BRB) of the National Research Council for "distinguished service on the Federal Construction Council."

Perhaps his most cherished award came in 1970 from his peers in the Moles, the fraternity of tunnel and heavy construction engineers and constructors. They honored him with their nonmember award for "outstanding achievement in construction." Even after his retirement, there was more recognition: In 1984 Douglas was elected to the American Public Transit Authority Hall of Fame in Washington, D.C.

Walter Douglas was renowned in his profession as a profound as well as pragmatic engineer of integrity and courage. Although he did not try to master all the intricacies of each technical discipline, he did maintain and enhance an excellent working knowledge of those disciplines that were applicable to the problems presented to him for his solution. He earnestly believed that almost any such technical problem, however complex and forbidding it might at first appear, could be brought to a workable solution by an intense concentration of fundamental knowledge and diligently applied analysis, accompanied by an endless perspicacity—which he possessed in abundance.

Walter Douglas had, and constantly practiced, the ability to concentrate on a chosen subject to the exclusion of all else. This largely explains his widespread reputation for absent-mindedness and "apparent forgetfulness" and the famed trail of "lost" hats, plans, and other items scattered in his wake around the world. Incidentally, the treasured experiences of some of his associates whom he drove about in his car are almost legendary in this respect!

When a project was in trouble, Douglas's action to rectify the trouble or to fight the necessary battle was immediate and total, regardless of the cost. His courage, intelligence, and perseverance would usually bring success—to the benefit of the job itself as well as that of the firm.

Douglas moved easily among important people, many of them high public and private officials. From such associations he added to and enhanced his philosophy of operating. He once questioned a top official of a major bank about why he (the official) had so quickly changed his previous position. "Walter," said the banker, "I always keep an open mind, and I reserve to myself the right to change it—but only if something better is proven to me." Douglas adopted that philosophy and often quoted his banker friend. He insisted that practical alternatives be studied and reported, even if not specifically required by contract or client, to try to protect and provide the client and the project with all available facts and with an optimum solution.

Douglas devoted much time and effort to community service. For many years, he served as trustee and as guardian of the grounds of the Crescent Avenue Presbyterian Church in his hometown of Plainfield, New Jersey. Douglas was also a member of the board of governors, and later president, of Muhlenburg Hospital. He followed a similar course in retirement when he served as trustee of Newport Hospital in Rhode Island.

Ocean sailing was Douglas's favorite pastime, and he was an excellent seaman. He and his wife, Jeannie, often accompanied by friends, would cruise for days at a time. In this

situation, he continued to apply his principle of opting for the best alternative solution—even seemingly at the last minute—much to the excitement (and later reminiscent enjoyment) of his shipmates! Walter never failed to make the best move; he was a good captain of his ship and a grand host.

We will miss him and so will the engineering profession. Walter Douglas left his mark, however; his trail, although difficult to follow, is clear for all who decide to try.

