

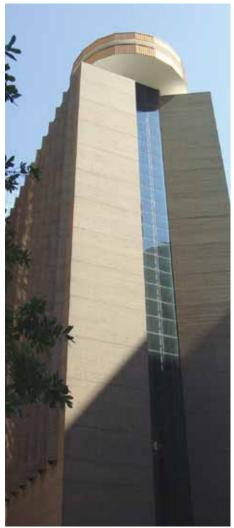
notable structural engineers GREAT ACHIEVEMENTS



Walter P. Moore, Jr.

Computer Sophistication and National Prominence By Richard G. Weingardt, P.E., Dist.M.ASCE, F.ACEC, D.Sc.h.c.

hen Rice University presented Walter P. Moore, Jr. with its Distinguished Alumnus Award in 1995, it reported: "From the time he was a child, Walter knew he would be an engineer like his father. What he didn't know was that someday he would equal his father's success. Like his father, he has won three of the most prestigious awards a person can win for professional achievements: Rice's Outstanding Engineering Alumnus, Engineer of the Year Region IV given by the Texas Society of Professional Engineers, and Rice's Distinguished Alumnus this year.



Hyatt Regency Hotel, Houston, TX. Courtesy of Evelyn Weingardt.

They are the first father and son to win all three awards." In addition, Walter, Jr. was the recipient of a distinguished alumnus award from the University of Illinois and a member of the National Academy of Engineering.

Asked if he had surpassed his father's success, Walter, Jr., replied, "Hell, no. I am doing well just to match him. He [Walter, Sr.] came out of the Depression and, through a lot of hard work, created a firm that built things like the Rice Stadium. I came along when everyone knew who I was. But by the same token I moved the firm into the computer era and made it a national firm."

Moore took over the leadership of his father's firm, Walter P Moore (WPM), in 1971 when the 69-year-old founder stepped down as president. At the time, the company was headquartered in Houston with a handful of smaller branch offices scattered around - and a bulging portfolio of impressive Texas projects. As his father's understudy, Walter, Jr. was involved in many of the major ones, most notably the Miller Outdoor Theater, Six Flags AstroWorld, alterations to the Astrodome, and the Houston Hyatt Hotel, which officially debuted in 1972. At 401 feet, the Hyatt was (and is) Houston's tallest hotel. For its crown, it has a roof-level revolving restaurant known as "Spindletop." The hotel's dramatic 30-story atrium was the backdrop for the 1976 Hollywood movie Logan's Run.

While president and later chairman of the board of WPM, Walter, Jr. was instrumental in leading the firm to national prominence in the design of high-rise buildings, sports facilities and other complex projects. In increasing and broadening the firm's range of clients and ventures, and greatly improving its computer-design capabilities, he was intimately involved in the engineering of such noteworthy structures as the Pyramid Arena, Memphis, Tennessee; IBM Tower in Atlanta, Georgia; and NationsBank Corporate Plaza in Charlotte, North Carolina. When completed in 1987, the IBM Tower (now known as One Atlantic Center, with Johnson/Burgee as architects) was the tallest building in the Southeast at 825 feet. The NationsBank building (today called the Bank of America



Walter P. Moore, Jr. Courtesy of Walter P Moore.

Corporate Center, and designed by architect Cesar Pelli), when topped off at a height of 871 feet in 1992, garnered the title as the highest building in North Carolina.

Walter, Jr. was born in Houston on May 6, 1937, to Walter and Zoe (McBride) Moore, the oldest of two boys. Following in his father's footsteps, Walter, Jr. became a structural engineer while his younger brother, Robert Laurence ("Larry"), became a history professor. The young Moore brothers grew up a few blocks from Rice University and played along the shady tree-lined streets in the area. Walter, Jr. perfected his tennis game on the university's clay courts and attended college football games at Rice Stadium, which was engineered by his father as were a number of other Rice campus structures.

Many years later, when head of WPM, Walter, Jr. also engineered several Rice buildings, including Sewall Hall, Lovett College, the Mudd Computer Building, Anderson Hall, Jake Hess Tennis Facility, Herring Hall and the Duncan Building (Rice's state-ofthe-art computational engineering facility).

The entire Moore family studied at Rice. Walter, Jr.'s father graduated in 1927, while his mother Zoe attended the institution in 1926. His brother Larry graduated in 1962 and Walter, Jr. received a bachelor's of art in civil engineering in 1959 and a bachelor's of science in the same field in 1960. Throughout his life, Moore gave generously to his alma mater. He served as president of the Rice Alumni Association and the Rice Engineering Alumni Association, and on the board of the Rice Design Alliance and its Engineering Advisory Council. He was also an adjunct professor of architecture and served on the Architectural Advisory Council.

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One Atlantic Center, Atlanta, GA. Courtesy of Wikimedia Commons-Magnus Manske.

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Duncan Hall, Rice University, TX. Courtesy of Evelyn Weingardt.

Prior to college, while attending Houston's Lamar High School, Walter, Jr. began dating Mary Ann Dillingham. She was a cheerleader and he played guard on the school's basketball team, where his steady and dependable performance earned him the nickname "Rock." The pair became high school sweethearts and later married, after she spent two years at Texas Christian University before transferring to the University of Houston to complete her degree in English and education. The young couple then moved north to Urbana, Illinois, where Walter, Jr. earned a Master of Science and a Doctor of Philosophy in structural engineering at the University of Illinois.

After receiving those advanced degrees, Moore served as a captain in the U.S.

Army Corps of Engineers, then moved back to Houston where he joined his father's thriving consulting engineering business. Moore's entire career as a consulting structural engineer was spent with his dad's firm, with all the plusses and minuses that come with being the son of the founder of the company. He began at the bottom and moved up through all the necessary positions until he became president and chairman, just like his role-model father.

In 1994, while remaining chairman of the board, Moore relinquished his position as president of WPM and accepted a distinguished professorship in academia, at Texas A&M

University in the College of Architecture and Department of Civil Engineering. He held the Thomas A. Bullock Endowed Chair in Leadership and Innovation, and was director of both the Center for Building Design and Construction and the Center for Construction Education. Along with his duties as a professor of both architecture and engineering at Texas A&M and as chairman of WPM, Moore also served on the Board of Directors of the CRS Center in Houston.

With his extensive background in the design and construction industries, Moore believed that, in addition to theoretical analysis, future structural engineers and architects needed exposure to actual design and construction issues. He said, "What I do is bring real world problems and leadership situations to the students. A&M was founded not to just educate engineers, but to turn out leaders. That spirit seeps through into everything. Our students are immersed in a wide range of outside activities: church groups, engineering societies and the community. In my classes, part of a student's grade is dependent on his or her presentations skills and how well they can communicate their solutions. They must spend time outside the classroom developing these skills. Their grade depends on it."

Moore also opined that engineering education should be modified to be more in line with that of the schools of architecture, law and medicine - a four-year undergraduate degree (with a



Bank of America Corporate Center, Charlotte, NC. Courtesy of Wikimedia Commons-Fife Club.

diverse collection of subjects) followed by a concentrated two- or three-year master's (or professional) degree in engineering. He stated, "That type of education would turn out engineers much more in tune to the world around them, which is an advantage young architects and lawyers have over engineers."

In the future, said Moore, "Engineers must take a leadership role, not just an advisory role, in the proper use and development of technology. Engineers need to prepare themselves for this expanded role in society. Decisions are constantly being made by those who have no scientific or engineering backgrounds. Engineers need to become more visible so that ordinary citizens in our society desire, or even demand, that technology decisions come primarily from engineers. It is time for engineers to redirect their effort and energy in order to assume responsibility for our nation's future – not to leave our society's destiny totally in the hands of academics, bureaucrats, politicians and others who lack technical expertise."

Moore was widely published and a soughtafter speaker. He contributed his time and talent to numerous academic institutions and professional societies, serving on the national board of the American Concrete Institute (ACI), as vice president of the American Council of Engineering Companies (ACEC), and on the Executive Committee of the Council on Tall Buildings and Urban Habitat (CTBUH).

Other professional organizations in which Moore was active included the American Society of Civil Engineers (ASCE), the Society of American Military Engineers (SAME), the Consulting Engineers Council/ Texas (CEC/T), the International Association of Bridge and Structural Engineers (IABSE), the National Society of Professional Engineers (NSPE), and the Structural Engineers Association of Texas (SEAoT).

Notable among Moore's numerous awards, honors and recognitions were being named an Honorary Member of AIA, the Master Builder by the Associated General Contractors in 1995, and a Distinguished Member of ASCE. He was also the 1996 recipient of ASCE's prestigious Edmund Friedman Award.

Moore died on June 21, 1998, in Houston, from injuries suffered in a terrible automobile

accident. He was survived by his wife Mary Ann; his children Walter P. Moore III and his wife Sarah, Melissa (Moore) Magee and her husband Michael, and Matthew D. Moore and his wife Valerie; five grandchildren; and his brother Larry and his wife Lauris.

Since Moore's passing, a number of national awards have been established in his name, among them: SEI's Walter P. Moore, Jr. Award, SEAoT's Walter P. Moore, Jr. Merit Scholarship, and ACI's Walter P. Moore, Jr. Faculty Achievement Award.

Richard G. Weingardt, P.E., Chairman, Richard Weingardt Consultants, Inc., Denver, CO. He is the author of nine books. Two of his latest, <u>Circles in the Sky: The Life</u> and Times of George Ferris and <u>Engineering</u> <u>Legends</u>, both published by ASCE Press, feature the exploits of great American structural engineers who had significant influence on the progress of the nation. His current book nearing completion, <u>Empire Man</u>, is about Homer Balcom, the structural engineer for the Empire State Building. Mr. Weingardt can be reached at **rweingardt@weingardt.com**.

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