notable structural engineers



John "Jack" Martin. Courtesy of JAMA, Inc.

ittle did 34-year-old John A. "Jack" Martin know in 1953 when he established his consulting engineering firm – John A. Martin & Associates, Inc. (JAMA) – how successful it would become and how many lives he would meaningfully influence.

Under Martin's leadership, his Los Angelesbased operation grew into 16 offices nationwide, employing over 450 people involved in more than 60 million square feet of new structures annually, making it one of the largest structural engineering consulting organizations in the U.S. By the early part of the 21st century, JAMA had completed structural design work on some \$50 billion worth of construction. Included in its immense structural portfolio are notable convention centers, high-rise office buildings, hotels, casinos, theatres, sports arenas, race tracks, parking structures, airports, hospitals, and educational and government facilities, both in the U.S. and overseas - in countries like Iran, Saudi Arabia, Jordon, Kuwait, China, Korea, Hong Kong, Indonesia, Taiwan and Spain.

Many of the award-winning projects designed by Martin companies have become landmark structures in their locations - among them the sweeping, stainless-steel-faced Walt Disney Concert Hall in Los Angeles; Mirage Hotel and Casino in Las Vegas, with its celebrated volcano eruptions and light shows; San Diego Convention Center, with its distinctive Teflon-coated fiberglass, sail-shaped central hallway roof; classic Coors Field in Denver; and futuristic Bangkok International Airport Terminal Two in Thailand.

A mentor and role model to countless young and emerging engineers, both within and beyond his firm, Martin inspired many to reach

high levels of greatness. Several have gone on and established their own successful consulting engineering firms, including Jim Cagley of Cagley and Associates, Rockville,

Maryland; and Ann Olsen, cofounder with Ron Rivett of MRO Engineers, Rochlin, California.

Labeled creative, brilliant, practical, pragmatic, tenacious, teacher, mentor, intellectual, innovator and explorer, Martin was well-known for helping engineers, architects and contractors learn the importance of solving problems creatively – and not just relying on computer formulas. He said, "I encourage young engineers to visualize what they are designing and have a feeling for the size of what they are creating and connecting before getting into the computer and performing calculations. Knowledge

and experience - knowing how to look at a building and figure out how it works instinctively - are very important in this business."

Jack was born on December 12, 1918, in Spokane, Washington, the son of Stuart and Hazel (Laramore) Martin. His father, a sales-

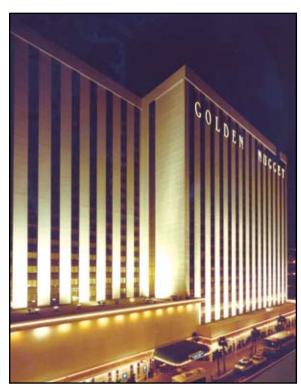


Fremont Hotel and Casino, Las Vegas, NV. Courtesy of JAMA, Inc.

man, moved the family around a lot during the Depression years. Young Martin spent his youth in Spokane, Hobart and Longview, Washington; Seaside, Oregon; and Burbank, Glendale and Los Angeles, California. In ten years he attended eight different schools.



Watt Disney Concert Hall, Los Angeles, CA. Courtesy of Library of Congress, Prints & Photographs Division, photograph by Carol M. Highsmith.



Golden Nugget Hotel and Casino, Las Vegas, NV. Courtesy of JAMA, Inc.

In LA, Martin attended Manchester Avenue School. He said, "Because my parents often worked until 8 to 9 PM, Bill Duverney put me in charge of all basketball courts in the indoor gym when I was 13 years old and I spent my evenings there." Later, he started working part time in lumber camps and wheat fields in Oregon and Washington, which he continued to do after he graduated from Brett High in LA. While in school, he wrestled and played football and baseball. By the time he was 17, he had become a talented American Legion ballplayer.

Martin said, "I had no intention of going to college." In 1938, on his way home to LA from working in the wheat fields in Spokane, he met his father in Oakland, California. Martin said, "It hadn't been a good year in the fields and unbeknownst to me my father had set up a luncheon with Clint Evans, who was the baseball coach at Berkeley. We discussed baseball. My dad had already told him what a 'great' baseball player I was."

During his 25 years as head coach of the Bears at the University of California at Berkeley (Cal), from 1930 to 1954, Evans recorded 547 victories. He guided the Bears to nine



Thomas and Mack Center, Las Vegas, NV. Courtesy of JAMA, Inc.

California Intercollegiate Baseball Association titles, six outright and three as co-champions. In 1947, his Cal team won the NCAA title. A number of Evans' players went on to become standouts in the pros.

At their first meeting, the legendary coach asked young Martin, "Why don't you come to school at Berkeley?" Jack said, "I have no money, no job and no place to stay and don't know what I'll study." Evans continued, "If I get you a job, a loan, and a place to stay will you come and play baseball at Cal?" Martin told him that if he would do all that he wouldn't even go home to LA, he'd go directly to Berkeley.

Said Martin, "I got a job at the Student Union and a place to stay at the Phi Sigma

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Kappa house, and a loan. The counselor assigned [to] me noted that I had taken some pre-engineering courses earlier and, when I mentioned that the only thing I was good at as a student was mathematics, he suggested engineering as a career path. And that's how I got into engineering, and I've never been sorry I did!"

Shortly after Martin became a full-time college student, World War II began in Europe with Hitler's invasion of Poland in September 1939. Within two years, the U.S. would be drawn into the conflict and life for all young Americans like Jack changed drastically. On December 12, 1941, less than a week after the Japanese bombed Pearl Harbor - officially engaging the U.S. in WWII - Jack joined the U.S. Navy, his engineering college education disrupted. Martin was sent to the South Pacific, serving on the destroyer USS Russell. During his five-year naval career, Martin received his civil engineering degree at Cal in 1943. Shortly after graduation, he was sent to the U.S. Naval Academy, where he completed his officer training. There,

Upon his release from the Navy in 1946, Martin joined the one-year-old structural engineering firm of Brandow and Johnson Associates (B&JA). Its founders, George Brandow and Roy Johnson, both University of Southern California (USC) graduates, were only a few years older than Martin. At first, B&JA did a lot of university buildings and schools, then eventually expanded into high-rises, convention centers and other types of structures.

he says, he learned self-discipline.

After seven years with B&JA, Martin decided to open his own consulting engineering firm in 1953. By then, he and Effie Winona, who was George Brandow's secretary when



Coors Field (Rockies Baseball Stadium), Denver, CO. Courtesy of Richard Weingardt Consultants, Inc.

they met, were married. Jack and Effie would have three children, John A. "Trailer," Jr., Randal and Jamie. Trailer followed in his father's footsteps and became a structural engineer. He is the current president of JAMA, while his father remains chairman and CEO of the Martin Associates Group.

JAMA's first major commission came in 1954, for the structural design of the Fremont Hotel and Casino in Las Vegas, Nevada. When the 155-room, \$6 million Fremont officially opened on May 18, 1956, it was the tallest building in Nevada. Among other JAMA projects that were highlights in his career, Martin lists these:

• Angeles Plaza Senior Housing (highrises) in Los Angeles.

- Golden Nugget Hotel and Casino in Las Vegas.
- Ministry of the Interior Building in Riyadh, Saudi Arabia.
- Thomas and Mack Center at the University of Nevada, Las Vegas.

Active in engineering societies throughout his career, Martin served as president of both the Structural Engineers Association of Southern California (1976-77) and the Structural Engineers Association of California (1978-79). He is (or was) an ACI Fellow and an ASCE Life Member. He is (or was) an active member of the Consulting Engineers Association of California, National Council of Engineering Examiners, Tall Building Council, Prestressed Concrete Institute and UC Berkeley's Engineering Alumni Association and Engineering Advisory Council, USC Architectural Guild and LA Area Chamber of Commerce. A lifetime supporter of American Legion baseball programs, Martin coached and/or sponsored several youth leagues in the Palos Verdes area for years.

For his significant contributions inside and outside the industry, Martin has received numerous honors and recognitions, including the following:

 Alfred E. Lindau Award from the American Concrete Institute (ACI) for "many years of leadership in advocating common sense and a practical approach to seismic design of reinforced concrete." (1985)



Ministry of the Interior Building, Riyadh, Saudi Arabia. Courtesy of JAMA, Inc.



A role model for engineers giving back to their alma maters, Martin founded – and continually supports – the John A. Martin Scholarship Endowment Fund at the College of Engineering, University of California at Berkeley.

For years, Martin swam every morning and, today, the 89-year-old engineering legend still goes to the office regularly.

Richard G. Weingardt, P.E., is the CEO of Richard Weingardt Consultants, Inc. in Denver, Colorado. He is the author of nine books; the latest, <u>Circles in the Sky: The Life and Times of George Ferris</u>, is scheduled for publication by ASCE Press in late 2008. Weingardt's other recent book, <u>Engineering Legends</u>, features numerous great American structural engineers. He can be reached at **rweingardt@aol.com**.

- Humanitarian Award from the National Conference of Christians and Jews for "support of the Eisenhower Medical Center and Citizens for Safer Housing." (1990)
- Lifetime Achievement Award from the LA Area Chamber of Commerce for "leadership in the construction industry and important contributions to the growth and success of southern California." (1991)
- Distinguished Engineering Alumni Award from the College of Engineering, University of California at Berkeley. (1994)
- President's Award from the Los Angeles Tall Building Structural Design Council for "outstanding achievements in and life-long contributions to the structural design of tall buildings." (1997)
- Lifetime Achievement Award from the American Institute of Steel Construction (AISC) for "making a difference and providing outstanding service to the structural steel design/construction/ academic community." (2004)

At one time in his career, Martin held professional engineer licenses in 49 states. Today, he still possesses two California engineering registrations – a civil license (first issued in 1949) and a structural license (first issued in 1951).



Angeles Plaza Senior Housing, Los Angeles, CA. Courtesy of JAMA, Inc.

