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Steve Baldrige — an added value

He grew up in the rough-and-tumble of Chicago, but is leaving his mark across the Pacific and beyond.

By Susan Wallace

Growing up on the South Side of Chicago in the '60s and '70s, Steve Baldrige knew education was the way out of his rough working-class neighborhood. When Baldrige left town to pursue a degree in civil engineering he didn't abandon his family-taught values of hard work, responsibility and frugality, nor did he misplace his concern for fellow human beings. Using those building blocks, Baldrige successfully received his engineering degree, earned his master's and founded the acclaimed firm of Baldrige & Associates Structural Engineering (BASE) — a boutique engineering firm dedicated to innovative, practical approaches to making buildings stronger, safer and more cost-efficient.

During his career, Baldrige has also received several awards for his work with at-risk youth.

However, it wasn't always smooth sailing for Baldrige. His father, Ernest, was a tool-and-die maker, while his mom, Gladys, was a purchasing clerk — both hard workers. Baldrige received his elementary and secondary education in the Chicago Public School System — at that time reputed to be one of the worst systems in the country. Young Baldrige studied hard and from the time he was 13 held down a job, too. Though he witnessed the bad choices of friends, the ugliness of racial prejudice and the social problems that go along with living in a rough area, Baldrige served as a role model working as a Boy

Steve Baldrige poses with local children during his trip to Haiti in early 2010 to investigate quake damage. He reported he gave most of the food and snacks he brought with him to the children — forcing an involuntary diet upon him.

Scout camp counselor and as a lifeguard for the Chicago Park District. In spite of peer pressure, he had friends of all races.

From childhood, Baldrige had an interest in science and technology. As a youngster, he watched planes land at Midway Airport, not far from his home, and then as a teen became fascinated with the high-rise buildings of downtown Chicago in the 1970s — skyscrapers such as the John Hancock Center and the Sears (now Willis) Tower. His college career began at Illinois Institute of Technology and then he transferred to the University of Wisconsin-Madison, where he earned his Bachelor of Science degree in Civil Engineering in 1982. But the 1980s was not a good time to launch an engineering career. An economic downturn much like today's meant jobs were hard to come by. Baldrige's first job may have set a record for brevity.

"I was one of the few who received a job offer right out of college. But, before moving to Texas, I was laid off before I even started because the company that hired me had to cut back," he said. "So, I job hunted from 8 a.m. to noon and then, for money, laid bricks from noon to 7."

After finding an engineering job, Baldrige realized that to get ahead in his profession he needed a master's degree. He tried to balance work with night school but it wasn't long before he decided to go to school full time. Living off the money he'd saved, Baldrige received his Master's degree in Structural Engineering from the University of Texas at Austin in 1984. After 4-and-a-half years working for various firms in the Dallas and Houston areas, he had the opportunity to go back to Chicago and join CS Associates, Inc., where he expanded his knowledge and experience and, in retrospect, formed the management philosophy he uses today.

"The firm was small yet worked on some of the larger high-rise projects in Chicago. Chris (Stefanos) had a design/build mentality. Because they weren't a massive company, CS was not set in their ways. The offices were located between a butcher shop and a bakery," Baldrige laughed. "I used to refer to the location as 'the butcher, the baker and the skyscraper maker'."

In 1990, Baldrige was drawn to Hawaii. At that time, Hawaii was enjoying an infusion of Japanese investment and construction was booming. Five years later, when the market took a turn downward, Baldrige saw it as an opportunity to establish BASE, where he was the sole employee.

While working for other firms, Baldrige earned a good reputation with the clients. They liked his work, yet they were hesitant to hire him for the big jobs. Baldrige's ingenuity stepped up and he made the decision to seek government jobs. He set about learning all he could about security-type design and military requirements. The government had increased building requirements in light of the Oklahoma City bombing and other terrorist activity. This was even before 9-11.

"He (Baldrige) has kind of embraced a lot of this type design, especially as it connects to the military," David McVeigh, principal of Rim Architects, who also has worked on military projects with Baldrige, was quoted as saying in Pacific Business News. "He has gone above and beyond the call in learning and becoming an expert in this particular area."

Baldrige found this niche lucrative as most local firms would bring in people from the mainland to work on these projects. He and his staff were able to provide expert service normally outsourced. Baldrige's "frugality" also played a role in acquiring these jobs.

"I'm a taxpayer, too," he said. "I'd rather the government spend money on defense technology or improving the quality of life for our military than on construction."

Just like with non-government clients, BASE worked hard to bring the best value to a project in regards to budget and time while still achieving and exceeding the rigorous standards and requirements for military projects. Baldrige had definitely found a niche as he was awarded more and more of those types of projects.



Steve Baldrige holds the Pacifica building in Honolulu close to his heart. The high-rise features a diagonally braced concrete structure.

Seventeen years later, BASE has become a premier boutique structural engineering firm expanding globally with a roster of 30 employees and offices in Honolulu, Guam and Chicago. Among Baldrige and his team's credits are the Trump International Hotel & Tower in Waikiki, Honua Kai Resort on Maui, the military's Hawaii Regional Security Operations Center, and one he's especially proud of – Pacifica. This is a high-rise building in Honolulu and is a diagonally braced concrete structure. The first structure of this kind was constructed in New York and was designed by Jacob Grossman with the firm Robert Rosenwasser Associates. The Pacifica manages to squeeze 46 floors under a 400-foot height restriction and features floors that are only 6 inches thick.

One project in particular has touched the hearts of many – the new USS Arizona Memorial Visitors Center. The previous center was 25 years old and built on poor soil. After extensive study, it was determined



A long-distance ocean swimmer, Steve Baldrige participated in a seven day Greek cruise in September. Along with 23 other participants, he swam twice a day, about 4 miles each day. His ultimate goal is to swim from Turkey to Greece, finishing at the Isle of Lesbos.

that a new visitor's center was needed. During the design process, Baldrige took part in a charette where those with ties to the memorial and Pearl Harbor were asked to give their input and impressions.

"It was so emotional to hear those stories. I think it touched everyone. I know it did me," he said.

Not only is the USS Arizona Memorial Visitors Center a place of national significance, it is also designated as a terrorist target. Therefore, BASE implemented the Department of Defense Antiterrorism Standards as outlined in the Unified Facilities Criteria.

As a member of the Earthquake Engineering Research Institute, Baldrige has witnessed firsthand the devastation of earthquakes and tsunamis. He is a FEMA-trained urban search and rescue structural specialist.

"I grew up near a Chicago firehouse and would hang out there every once in a while. When I was only 16, working as a lifeguard on Lake Michigan, I had my first 'rescue'. I had not been a lifeguard that long so it was pretty intense. I think those early days influenced a desire to be involved in disaster response," Baldrige said.

Some of Baldrige's most touching professional experiences are connected to disaster response.

In the fall of 2009, Baldrige went to Samoa right after an 8.1 earthquake triggered a tsunami that caused major damage and the loss of life. The experience taught him about the nuances of working in the field.

"Samoans are close to the land they own. We found village elders sitting on the debris refusing to leave their property," Baldrige said. "We explained we were not there as FEMA but rather to determine what could be done so a tragedy like this would not happen again. Then they were happy to cooperate."

Three months later the disaster in Haiti happened. Baldrige received a call from his friend Chris Rojahn asking him if he'd be interested in going to Haiti with a group of engineers. At first, Baldrige said no, having heard of the dangers. Rojahn explained the group would be working under the direction of the U.S. Military. Baldrige agreed to go.

"It was a good experience but yet heart wrenching," he said.

Their assignment was to check housing, hospitals and buildings for safety. They worked from 7 a.m. to 7 p.m. One of the most disturbing scenes he witnessed was at a badly damaged hospital. To the side he saw babies covered by a blue tarp outdoors in the heat. When Baldrige asked about it, he was told this was a temporary nursery. Just a short distance from there a woman was giving birth out in the open. Quickly, Baldrige and his group assessed the hospital and determined it was safe to move these tiny patients and the new mother into the facility.

"The military looked after us. We felt safe," Baldrige said. "It was amazing to see how professional they acted in their disaster assistance."

Baldrige spent three weeks in Haiti. He chose to spend an extra day there participating in a "mash run," distributing supplies. He flew out on a C130 relief flight surrounded by refugees.

“It was emotionally draining and life-changing. But I am so glad I was able to give back through my engineering,” he said.

Giving back is something Baldrige is passionate about. After witnessing Chicago friends make bad decisions when they were growing up, at-risk youth have a special place in Baldrige’s heart. He created the local branch of the Architecture Construction Engineering (ACE) Mentor Program – a program started nationally by Charlie Thornton. This group mentors high school students in an after-school program that gives them the opportunity to simulate the process of designing and constructing a project. Baldrige’s team won the inaugural CIRT/ACE national design competition. In addition to his work with ACE, Baldrige has been a vital part of Adult Friends for Youth for over two decades, having started as an Adult Friend. Through his influence he helped bring the Cross Sun gang into an association with the Bank of Hawaii as it was in the process of building a branch. The at-risk group received first-hand knowledge of the various occupations it takes to bring a large construction project to fruition and how a bank works.

Steve Baldrige wears safety gear during a US Chemical Safety Board-led investigation of a storage facility explosion that killed five workers.



“It really hit home with these kids when a welder shared his story,” Baldrige said. “He told them how he used to be a ‘goofball’ but now he melts steel, works outside and is paid well. And, more importantly, the welder pointed out to them he couldn’t do what he does if he were on drugs or showed up to work with a hangover. It was a true lesson in the value of hard work.”

The mentoring project facilitated the group’s transition away from gang life. Baldrige recently received the prestigious Service to Hawaii’s Youth Award as a result.

On the personal side, Baldrige enjoys endurance sports, long distance running and long distance ocean swimming.

“A couple of years ago I did three marathons in less than six months, running in the Chicago, Honolulu and Boston marathons. This past year I did a six-day ‘swim-trek’ where we swam between several Greek islands,” he said. “I sometimes compare marathon sports to engineering projects. If you don’t put the training in, you really pay for it at the end of a race. It is the same way with large projects – if you don’t put in the effort to put together a good set of construction documents, you really pay for it during the construction administration end of the project.”

In Baldrige’s opinion the biggest challenges facing the engineering profession are the economy and overreliance on computers. He stresses the need to understand the basics. Question and check the model. And above all, ask the client what his needs and expectations are, because the computer doesn’t.

Baldrige’s frugal tendency, learned from his grandparents, guides his approach to engineering.

“It is fun to fine-tune a structural design to meet safety and serviceability requirements while reducing material and labor requirements. I hate to waste resources and our clients benefit from this mindset,” he said. “I laugh sometimes about all the focus on being green these days... I think my grandparents were green before green was chic. I also think the best way for a structural engineer to be green is to design efficient structures.”

But Baldrige is not frugal when it comes to sharing his profits with his employees or volunteering his time. Baldrige has come a long way from the South Side of Chicago and his rough neighborhood, but hard work, ethics and giving back are still close at hand.

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