Engineering innovator

Sarah Fister Gale



Growing up in Sacramento, Calif., Skip Francies imagined that one day he would become a math teacher or an architect, but fate had other plans.

Francies enlisted in the Navy during the Vietnam War, just after graduating high school. He was stationed on the USS

Lexington (CV-16), an aircraft carrier where Navy and Marine pilots were trained for combat. While onboard, he received the Award of Excellence for creating a program illustrating ways to conserve water.

After being honorably disharged in 1967, he thought he would go back to school to get a teaching or architecture degree, but he also needed money. He applied for a job as an engineering technician at Burke Concrete Accessories (now part of Leviat), a concrete accessories and engineered products company. He knew that he was very good at calculus, trigonometry, and drafting, so he figured he would give it a shot.

Francies met with the chief engineer, Mr. Holt, and the head of the Sacramento engineering office, who told him about the company and asked him some questions about bending moments. He didn't know exactly what bending moments were, but he gave common sense answers, and they offered him the job.

He started work the next day.

Francies, who was just 21, was the first engineering tech hired by the company, and he was mentored by Dave Kelly, who was 26. "At the time, there were no computers, so drafting and calculations were done by hand," he says. He became the lead technician for forming, lifting, and bracing, and got to work on several precast concrete projects. "I love precast," he says. "I loved figuring out the center of gravity on the most complex shapes and determining how to lift and handle them safely."

Francies spent much of his career at Burke, inventing better solutions and detailing projects. In the early 1980s Burke asked him to be the West Coast salesperson for the new Precast Products Division. "I had never been in sales before, but I knew the products, I knew precast, and I knew the customers," he says. He spent 48 weeks on the road his first year in sales.

His passion for precast concrete led Francies to become one of the most innovative inventors in the industry. Over his career, he received 30 patents, many of them for inventing new ways to safely lift and move massive precast concrete elements without damaging the face. "I was always in the precast yard listening to what the guys didn't like or what could be done better," he says. "When we found something they needed that didn't exist, we tried to invent something new, a solution."

That led him to create a precast, prestressed concrete double tee lift anchor, a stronger forged lift anchor for precast concrete, a post installed corbel system, and a flange-to-flange double tee connector.

In the early 1980s, Francies joined PCI and immediately looked for opportunities to be active in the organization. "I always told my sales reps, 'When you join PCI, you don't just show up to chapter meetings. You have to get involved," he says. He encouraged them to join committees and to contribute to efforts to advance the industry. "We were all part of a big family."

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As a member of PCI, he left a legacy as one of the industry's experts in lifting and handling. He delivered many lifting and handling safety presentations for precasters and association training courses over the years. He also twice held roles on PCI's board of directors, chaired the Precast Sandwich Wall Panels Committee, was a member of the Parking Structures Committee, and continues to participate on the Erectors Committee and Marketing Council Parking Structures Committee, even though he retired five years ago.

Francies says one of his greatest career accomplishments was being named a PCI Fellow in 2011. "It was one of my proudest and most humbling moments, especially having it presented to me by Donna Reuter, who was PCI's chairman of the board at that time."

Although Francies may have transformed the way precast concrete pieces are lifted, moved, and handled safely, he says that there are many more innovations needed to be developed by current and future PCI members. "Some precasters are always looking for ways to innovate," he says. "And even if you can't always invent something new, it's still important to contribute. Get involved, listen, join a committee," he says. "That is how we make the industry better."