

Mike Jordan maritime hall of fame acceptance talk.

Thank you, Erik, for the introduction and Jim Anastasio, for the nomination.

As Erik said, my start was with the Navy. I reported for duty six decades ago at the Port Hueneme Naval Base. I was an ensign in the Civil Engineer Corps. The corps included the Navy's construction battalion. The Seabee headquarters were on the base. The Seabees built airfields on South Pacific islands during WWII.

A large billboard showing a cartoon of a giant bumblebee greeted me at the main gate. The bee wore a sailor's hat, had guns in its front legs, and construction tools in its other legs. Under the bumblebee was the Seabee motto "CAN DO."

A "CAN DO" mentality is the root of innovation. I will never forget it.

A few years later, when Sue and I founded our firm, we knew we would succeed by offering integrity and innovation.

Of course, more ingredients are needed for success: excellent engineers like Erik, Arun, and Larry Wright. Arun joined Liftech when the company was only five years old. Erik joined 24 years ago.

Decades ago Larry, Paceco's chief engineer, and I developed many innovations for STS cranes.

Developing innovative solutions has been fun.

But wait—one more ingredient is needed for success. The great client. The engineer provides the design. The client provides the courage to build it. There are many great engineers. There are only a few great clients. We have great clients.

Next, I will tell you about three projects: a ship, a damper, and the "I Lift New York" crane.

The first project: A Ship

Matson Navigation developed the first container ship. The container size was not standard. Still, a vessel was needed that could carry current containers now and standard containers later. How do you build a container ship without knowing the size of the container?

The solution: Instead of welding the athwart hatch beams to the deck structure, bolt them to the deck, so they can be relocated when needed. On a few ships, the guides were relocated to suit new container sizes. The cost for one ship was only \$60,000 in 1960 dollars.

The second project: A Vibration Problem

The two upper tubular back struts on more than one hundred STS cranes, designed by Liftech and already constructed, were vibrating excessively in moderate winds due to vortex shedding.

The struts were about 24 inches in diameter, 65 feet long, and not easy to modify. The solution needed to be easy to install quickly, and not cost an arm and a leg.

Conventional spoilers would not work. They would take too long to install, be expensive, and overstress the struts in strong winds.

The solution: Install a catenary wire rope spanning between the struts and having just the right tension. The stiffness of a catenary varies with the length, so it is not linearly elastic. My intuition said it would work. It worked. No more motion. Thousands of these dampers are used on cranes throughout the world.

The next time you are close enough to an STS crane, look for the dampers.

The third project: The “I Lift New York” Crane

Recently used on the Tappan Zee Bridge, this 1700 t floating crane needed to be large enough to handle heavy loads with large outreaches and yet be able to pass under low bridges with no more than 10 meters of clearance.

The solution: When stowed, the boom base slides aft, allowing the boom to lie down. Next, the aft A-frame folds down. So, the clear height of the crane above water is only 10 meters. Job done.

+++++

It's been fun solving so many challenges with the help of so many great engineers and great clients.

I am grateful to all those who helped. This honor is the icing on the cake.