

Crane Institute of America Improves Training with Vortex Simulator



"Crane operators are being put in the seat before they're ready to be put in there," says Jim Headley. Jim Headley has a long and considerably strange relationship with gravity.

As a young man, during the six and a half years he worked full-time to put himself through college, he used to body-slam himself onto the floor— "from a high ol' brass bed"—to wake up after only a couple of hours of sleep. Now in his mid-60s, Jim can still bench press 250 pounds with a cold. Jim Headley understands gravity quite well. So when he says the lifting industry has a problem, he means it. In the wake of the construction industry's shortage of skilled labour, companies are having trouble finding qualified crane operators. All too often, Jim says, this means companies are fielding under-qualified operators, at the cost of safety and sometimes lives.

Jim can't do much about the labour shortage, but he's doing what he can about the training. Jim is president and director of Crane Institute of America (CIA). CIA has trained or certified over 100,000 equipment operators, inspectors, supervisors, trainers, riggers, and other safety personnel since 1987. "The underlying cause of most accidents," he says, "is a failure to properly train and qualify personnel. That's why I want to provide the very best, the highest-quality training out there. I want to make sure we're helping the people in the field as best we can."

Well-known and respected across the construction industry, Jim Headley is bent on ensuring that CIA is America's leading provider of training services to the industry.

The Company

The USA's leading provider of training services to the lifting industry, Crane Institute of America (CIA) has trained or certified over 100,000 operators, inspectors, supervisors, trainers, and riggers since 1987.

The Situation

CIA is always looking for ways to provide the highest quality training program possible.

The Solution

CIA is always looking for ways to provide the highest quality training program possible.

The Results

The Vortex Simulator allows CIA to improve an already proven training program, and represents a vast cost savings compared to the alternatives.

Jim has a BS in Education—his staff says he never wastes a “teachable moment”—along with almost 50 years of association with the crane industry, including 16 years of experience as an operator.

He knows his training tools. “You know, trainers are only as successful as the training programs that are available to them. The Vortex Simulator provides a structure to our learning program... it’s a natural fit with our goal to provide the best possible training.”

At its training facility near Orlando, Florida, CIA uses its Vortex Simulator to familiarize trainees with concepts such as controlling the load, judging distances, and programming the on-board computer.

In the controlled, low-stress environment of the simulator, “trainees acquire the skills to safely and adequately operate a real crane more quickly,” says Jim.

“The Vortex simulator tremendously reduces the risks, costs, and time required to train new operators.”

“You can have an accident in the simulator and nobody gets hurt. You can learn a lot without suffering the consequences that you would suffer in the real crane.”

“It just makes my training product better”

Although CIA has been using simulators for 15 years, Jim was struck by the learning value of Vortex Simulators from the first moment he came across them at the CONEXPO trade show in 2012.

“I’m just very impressed with the Vortex Simulator,” he says. “It has the real feel. It almost puts you in the real world when you’re in the seat. It’s probably the best simulator I’ve ever seen.”

With the Vortex Simulators’ realism and built-in pedagogy, Jim Headley knew he’d found the right tool to increase training quality at CIA. Vortex Simulators deliver quantitative measurements of trainee performance for load control, collision avoidance, overloads, and operation near power lines. They also provide an operator performance database that allows instructors to benchmark future students.

“It just makes my training product better,” says Jim. “We advertise it in our catalogue, on social media... It draws students to our program.” The Vortex Simulator allows Jim to improve an already proven training program, but it also represents a vast cost savings compared to the alternatives.

“Simulators cost money, but the cost savings are enormous compared to learning on a real crane. As far as real cranes go, you don’t get much for a million dollars anymore. Maybe half a million for one of the small ones. Taking them out of service for training is expensive. And the other drawback of training on a real crane is you can only train one person at a time.”

“Plus,” he adds, “simulation training provides a higher degree of documentation in a highly litigious society.” Jim pauses while he reflects on the good old, less litigious days. “You know,” he says, “I would have learned more quickly on a simulator myself. The guys I apprenticed with in the early years of my career were great operators. They could do things with a crane that were unbelievable. They defied gravity. But they didn’t necessarily know how to teach you to operate a crane!”

