

# ACT

The magazine for the crane, transport & rigging industry

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A KHL Group Publication



SPECIALIZED RIGGING ROUNDUP

## Saddling a slug catcher



Official domestic  
magazine of  
the SC&RA

**INTERVIEW**  
Lift Source  
Machinery's  
Don Edelson  
**p10**

**PRODUCT FOCUS**  
Below the hook  
**p38**



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## Seasons change

Autumn has been a breath of fresh air for those of us in the South who withstood epic summer heat. I'm sure the construction industry at large is happy to see a new, cooler season as well. The new season brings with it a bunch of news. Headlines in the October issue chronicle corporate acquisitions, job changes among key leaders, fleet updates, new crane models, new distribution channels and more.

In the past, we have reported on dual-rated boom trucks, which allows the machine to go from a crane to a personnel lifting device and back. But this month, we took a more in-depth look at these cranes and the companies that produce them, and those who don't. Altec, Manitex, Elliott Equipment and Load King weigh in, and their viewpoints are quite compelling.

Manitex International's Randy Robertson told me that "customers and fleet owners appreciate the dual-rating feature and how it improves job efficiencies and equipment utilization." But on the flip side, Elliott Equipment's Jim Glazer said his company does not offer a dual-rated machine because of the absence of an industry standard for these machines. "Elliott does not want to create a false sense of security or confuse the operator prior to lifting personnel with a crane," Glazer said. This is an interesting article with several perspectives to consider.

We also present a roundup of specialized rigging jobs that utilized all sorts of interesting equipment and machines. Hannah Sundermeyer assembled a whole slew of Below-the-Hook products, and she also previews the AWRP PIE this month in Dallas. There's also a feature about simulator and VR training and a site report about a couple of huge ketchup bottles. Our Rigging Matters column focuses on sling protection.

I was very pleased to get Lift Source Machinery's Don Udelson to answer our questions for the Interview article. He offers some really good insight into his company and the industry at large.

School started, the season changed and crane and transport events abound. As the October issue went to press, our ACT team was fanning out around the world to cover the SC&RA Crane & Rigging Workshop, the Utility Expo, Breakbulk Americas, the AWRP PIE and the World Crane & Transport Summit Asia in Singapore. We will provide reviews from all these events in the next issue of ACT.

And finally, now is a great time to drop us a line and let us know what's going on with your machines, people and jobs.

## D. ANN SLAYTON SHIFFLER

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# How Telematics Saved One Company More Than \$100,000

BY ART KIRKNER

NBIS Claims

**NOT LONG AGO**, NBIS policyholder Deep South Crane & Rigging, LLC was involved in a frustrating scenario that might feel all-too-familiar.

Deep South's driver was operating a tractor trailer, on his way to a job site. As he was driving in the right lane of the interstate, an unexpected incident unfolded. An SUV in the far-left lane suddenly rear ended two vehicles, before flipping over and tumbling to a stop on the side of the road.

Deep South's driver stopped to check on the driver of the SUV.

This accident left three vehicles damaged, and the SUV driver injured, rushed to hospital by ambulance. When Deep South's team interviewed their driver about the incident, he vehemently denied any involvement in the accident.

A month later, a letter arrived from a lawyer representing an injured party, and Deep South promptly notified NBIS. The opposing attorney argued that Deep South's "big truck" was responsible for the accident. The attorney also demanded that Deep South preserve all evidence, reports, and pictures, and secure the tractor trailer for inspection by their expert.

The opposing attorney clearly saw Deep South as a potentially "deep pocket" with substantial insurance coverage. The situation was further compounded by the fact that the accident occurred in an area of the country known for its bias towards plaintiffs.

To make matters worse, Deep South's insurance policy carried a \$100,000 liability deductible. So, if the claim were to go to court, Deep South was on the hook for at least \$100,000. Additionally, their loss history could be marred by a substantial settlement, leading to increased insurance premiums in the future.

In the absence of independent evidence, the situation boiled down to Deep South's driver's word against the SUV driver's word, in a state that is not defendant-friendly, especially for companies operating large vehicles.

To put it mildly, it was not an ideal scenario.

## TELEMATICS CHANGES EVERYTHING

But what if the entire scene had been captured by an outward-facing dashcam?

Luckily, in this case, it was. And what it showed was vastly different than what the opposing attorney has suggested.

The SUV driver, driving in the far-left lane of the interstate, rear ended two vehicles also in the far-left lane. This impact caused the SUV to rollover as a result of the collision. The Deep South driver was always in the far-right lane throughout the accident.

Clearly, the SUV driver was at fault. The dashcam video provided concrete evidence supporting Deep South's driver's claim that he wasn't involved.

A copy of the dashcam footage was then shared with the injured claimant's lawyers. After reviewing the footage, they withdrew their claim.

Denial letters were sent, and the claim was rightfully closed.

## WORTH THE INVESTMENT

"Dashcam costs to our company were less than \$300 for that specific tractor trailer and it took just two hours of install time," said Deep South's Greg Hassenboehler. "It's an investment that paid dividends in so many ways."

For an incident like this one, an investment of a few hundred dollars ultimately saved Deep South the cost of its \$100,000 deductible and prevented the resulting premium increase that would likely follow.

By having the foresight to invest in safety technology, Deep South was able to avoid a catastrophic situation. What this story shows is that investing in your safety program need not be costly; it simply needs to be implemented.

## THE SAFE WAY IS THE ONLY WAY

Successful and profitable companies prioritize safety. So ask yourself this: Are you collaborating with the right risk management partner, one who understands the power of safety technology and fully comprehends the nuances of your business?

Equipped with the right experience, the right industry expertise, and the right

“

**Successful and profitable companies prioritize safety.**

”

trained, skilled professionals, NBIS is a risk management partner you can depend on, no matter what. We'll help you implement a safety program capable of reducing potential losses through the use of various safety tools and telematics, including dashcams like the ones at Deep South Crane & Rigging.

Grab your broker and make the call to NBIS today. You'll be glad you did.



### ABOUT THE AUTHOR

Art Kirkner is part of the NBIS claims team. With over 50 years of claims leadership, Kirkner has built a reputation for driving a customer-service-driven claims team.

Preparation is the best defense. Let NBIS help. Reach out today.  
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WORKERS' COMPENSATION





**Buckingham Transport assists with the delivery of a 450,000-pound slug catcher in Ohio.**



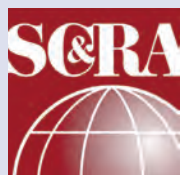
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## 10 INTERVIEW

Born into a family of equipment industry entrepreneurs, *Don Uderson* built Lift Source Machinery from the ground up. *D. Ann Shiffler* reports.

## 15 RIGGING MATTERS

*Kris Koberg* and *Mike Close* discuss sling protection and the difference between abrasion and cut protection.

## 20 PROJECT ROUNDUP

*ACT* rounds up some extra specialized rigging projects.

## 29 INDUSTRY SPOTLIGHT

*Hannah Sundermeyer* reports on simulator and virtual reality training for crane operators. Can in-the-seat training be replaced?



## MARKETPLACE

The most comprehensive listing of crane and transport services and equipment in North America.

## 63 TRAINING DIRECTORY

## 64 SLINGS & THINGS

## 65 DEALER LOCATOR

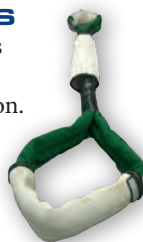
## 70 PRODUCTS, PARTS & ACCESSORIES

## 78 EQUIPMENT FOR SALE OR RENT

## 80 TRANSPORT & HEAVY HAUL

## SAFETY & INDUSTRY SERVICES

## CAREER OPPORTUNITIES



## 32 INDUSTRY FOCUS

Dual-rated boom trucks give users two machines for the price of one. *D. Ann Shiffler* reports.



## 38 PRODUCT FOCUS

*Hannah Sundermeyer* compiles the latest below-the-hook tools and previews the upcoming AWRP PIE event.



## 46 SITE REPORT LIFTING

Steffan Industries was tasked with the transport of iconic pieces of Pittsburgh sporting history.

## 82 LEGENDARY

Moving and installing statues and monuments is often newsworthy and legendary.



## 49 SC&RA COMMENT

The FMCSA will take a look at what improvements would enhance motor carrier safety through a new survey.

## 50 SC&RA NEWS

2023 was a productive year of new initiatives and rollouts for SC&R Foundation.

## 57 RISK MANAGEMENT

*Lauren Fronczek* discusses tips to streamline the insurance renewal process.

## DEPARTMENTS

### 6 NEWS

### 53 NCCCO NEWS

### 61 PEOPLE/EVENTS





BITS

■ Kansas City-based **Wilkerson Crane Rental** has purchased a new Manitowoc MLC300 crawler equipped with VPC-MAX. Wilkerson attributes the need for the new crane to a booming local economy, a new airport, data centers, a battery plant, new wind farms and infrastructure projects.

■ **Commercial Credit** was selected for the North Carolina Mid-Market Fast 40 List for the eleventh time.

■ Four new auxiliary cameras have been added to the VideoProtects Video Event Management System and Encompass Video Event Management System from **J. J. Keller & Associates**.



PHOTO: NEWELL DAVIS

## Tadano/EPA settle

**T**he Tadano Group has reached an agreement with the U.S. Environmental Protection Agency (EPA) and Department of Justice (DOJ) regarding alleged violations of the Transition Program for Equipment Manufacturers (TPEM), a program under the U.S. Clean Air Act. These regulations apply only to Tadano as a crane (equipment) manufacturer, and do not relate to the crane customers, according to a press release.

Per the terms of the agreement, the Tadano Group will pay a civil penalty of \$40 million and contribute \$3.2 million to a mitigation project to be carried out in Texas. This agreement wraps up the matter self-reported



**Tadano has settled with the U.S. Environmental Protection Agency over complaint engines used in cranes.**

to the EPA and announced in January 19, 2018, in which the Tadano Group said an internal investigation indicated the group may not have met all requirements of the TPEM program for a portion of engines mounted on Tadano mobile cranes imported to and sold in the U.S.

Today, Tadano Group

cranes imported or sold in the U.S. have engines meeting the applicable U.S. exhaust requirements. Tadano booked a financial reserve in prior years, and this matter and the settlement has no impact on Tadano cranes currently being sold now or after 2018 and has no current financial impact on the company. ■

## Mazzella acquires Newell Davis

Mazzella Companies has acquired Newell Davis Company of Wilmington, NC. The acquisition further strengthens Mazzella's footprint in the Atlantic region of the U.S. and along the eastern seaboard.

"It also reinforces Mazzella's commitment to

**Newell Davis has been servicing construction/government/military clients in the Carolinas.**

be a one-stop provider for rigging equipment and sling assemblies, engineered lifting solutions, training and the inspection and repair of cranes, hoists and rigging," Mazzella said.

Newell Davis has been servicing and supplying the construction, government/military and the ports industries in the Carolinas since 1976. It began as a small family-owned business by brothers Conrad & Chet Newell, along with Chet's son-in-law, William Davis. Newell

Davis will operate as Mazzella Newell Davis. Terms were not disclosed.

Wilmington, N.C. provides the opportunity and access to support new customers in industries like construction, ports, railroad, and U.S. government and military, according to Matt Mazzella, president of Mazzella.

"This strategic location will support and build off the success we've experienced in surrounding markets, including Virginia Beach and Charlotte," Mazzella said. ■

## MEI purchases sister transport companies

MEI Rigging & Crating, a national provider of rigging, machinery moving, millwrighting, mechanical installation, industrial storage, crating and export packing services, has acquired Pro-Pac International and J&J Machinery Transport, both based in Charlotte, NC.

"We are proud to welcome Pro-Pac and J&J to the MEI family," said Dan Cappello, CEO, MEI. "Their breadth of service offerings, depth of industry knowledge and outstanding regional reputation are a perfect strategic fit for MEI. We are excited to have the great teams

at Pro-Pac and J&J onboard and look forward to expanding our presence in the Carolinas and beyond."

Pro-Pac serves machine manufacturing, aerospace, medical and other industries. J&J Machinery Transport, Pro-Pac's sister company, has over 30

**MEI has acquired Pro-Pac International and J&J Machinery Transport, both based in Charlotte, NC.**







Mammoet will use its new Faymonville trailers to transport wind, machinery and crane components, as well as industrial machines.

## Mammoet purchases Faymonville trailers

Mammoet America has purchased two new 9-axle HighwayMAX trailers for various heavy haul projects across North America. HighwayMAX trailers permit a legal payload of more than 174,000 pounds at 20,000 pounds per axle and a technical payload of more than 249,000 pounds.

"The king-pin steering with counter-steered axles enables the necessary maneuverability," said Paul Hönen, sales manager, Faymonville. "The pendulum axles with 23 5/8-inch hydraulic stroke and a steering angle up to 60 degrees make the trailer ready even for difficult road conditions."

The Faymonville trailers also cut down set up time prior to loading and to reduce empty weight to increase the payload, the company said. The "truck & trailer" length also remains below 90 feet to travel without escort in most U.S. states.

Faymonville uses US-DOT certified components for brake- and lighting systems. For a permanent and quick after sales service, all spare parts are available in the U.S. market.

## Maeda names CraneWorks a new dealer

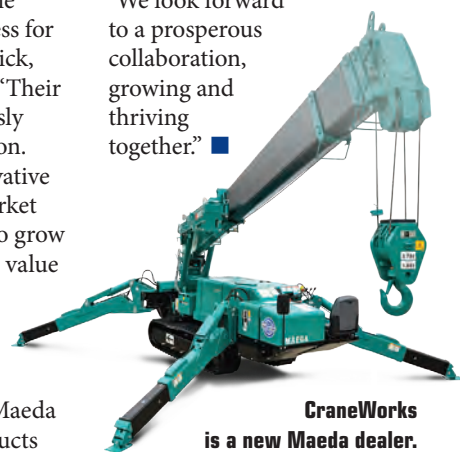
Maeda has named CraneWorks its exclusive dealer for the state of Alabama.

"CraneWorks has been a trusted name in the crane and construction business for years," said Robert Trawick, COO, Maeda America. "Their expertise aligns seamlessly with our values and vision. By combining our innovative crane line with their market insights, we are poised to grow and deliver unparalleled value to our clients."

Both companies are excited about this partnership.

"The combination of Maeda Cranes' innovative products

and CraneWork's industry acumen promises mutual growth and assures customer satisfaction," said CraneWorks President Kenny Bishop, "We look forward to a prosperous collaboration, growing and thriving together." ■



**CraneWorks**  
is a new Maeda dealer.



BITS

■ **Elliott Equipment** has introduced its new D47 digger derrick. The D47 features a class-leading 26,000-pound maximum lifting capacity, making it ideal for a wide range of lifting and material handling tasks. The D47 is also backed by a lifetime structural warranty.

## Wolffkran debuts new flat top model

Wolffkran has unveiled a new addition to its crane portfolio with the 224 metric tonne WOLFF 6523 Clear. The new flat top model is based on the popular classic WOLFF 6031 Clear. In addition, the WOLFF 6523 Clear offers a patented, newly designed jib and its technical equipment for operating the WOLFF High-Speed-Positioning-System (HiSPS).

The HiSPS assistance system was introduced at bauma in

2022. Sensors on the trolley and hook block together with a control unit enable the load to be transported free of load sway by detecting the rope's movements and automatically adjusting the movement and speed of the crane to it.

"This new development also provides advantages during crane operation," said Dr. Mohamed Abouelezz, head of product management and business development at Wolffkran. "Thanks to the

smooth jib transitions, trolleys equipped with lateral guide rollers run more steadily and smoothly along the jib. This makes it easier to finely position the load, even without using the High-Speed-Positioning-System."

The WOLFF 6523 Clear will mainly be sold in the DACH region. A version with a maximum payload of 10.5 tons in 2-fall operation as well as an U.S. version are being planned. ■



years of experience providing heavy haul equipment transport, step deck and flatbed delivery, plus nationwide, long haul and oversize load trucking services.

Jim Jones, previous co-owner and president of Pro-Pac and J&J Machinery Transport, will lead operations of both companies under MEI's ownership.



**The new WOLFF 6523 Clear is the first WOLFF crane that is technically designed for the new High-Speed Positioning system, the company said.**



## Superior Rigging adds new Liebherr to its fleet

Superior Rigging & Erecting has purchased its newest and largest crane to date, the Liebherr LTM 1450-8.1. The 550-ton all-terrain crane arrived at Superior's yard early September 2023 and adds significant lifting power and reach to their fleet.

The Liebherr LTM 1450-8.1 offers a max capacity of 550 tons and max radius of 335 feet. The 8-axle crane has a telescopic boom of 279 feet but can quickly be assembled to reach its max hoist height of 433 feet. This crane can travel on public roads with its fast-erecting telescopic boom, four outriggers and the hoist winch, totaling 211,560 pounds and 26,450 pounds per axle, with an 8-axle load.

A Liebherr LTM 1160-5.2 190-ton all-terrain crane also arrived at Superior Rigging & Erecting's yard in July 2023. The crane was the second of several large mobile cranes Superior is adding to their fleet this year.



**The Liebherr LTM 1450-8.1 offers a max capacity of 550 tons and max radius of 335 feet.**



## GT-1200XL-2 debuts in U.S.

**D**avis Crane Service has purchased the first GT-1200XL-2 truck crane in U.S. through Tadano's Texas distributor, Scott-Macon Equipment.

"We wanted the first GT-1200XL-2 because it fits our taxi crane business, the 110-120-ton market is a big one for us and we trust Tadano cranes," said Wes Dowd, director of operations & equipment, Davis Cranes. "Our driver-operator drove the new truck crane here and said it was just like a Cadillac. And

the Tadano's we have in the fleet currently have been just bulletproof. They are just great machines."

Introduced at ConExpo earlier this year, the truck crane features a 5-section, 167.3-foot main boom, 33.1 foot/58.1-foot bi-fold jib and a max speed of 65 mph. The new Tadano truck cranes for the U.S. and Canadian markets can easily get special permitting for transport, as they feature low axle weights, narrow transport width and long boom designs. ■

**Pictured Left to Right: Daniel Bennett (Davis Crane), Ken Butz (Tadano), Kurt Timmons (Davis Crane), Bryan Simpson (Davis Crane), Wes Dowd (Davis Crane), Dean Barley (Tadano), Keith McKee (Davis Crane), Todd Elkins (Tadano), Allan Woodruff (Scott Macon), Mike Thomas (Davis Crane), Danny Eastep (Scott Macon), Tom Adrian (Davis Crane).**

## Sims Crane exhibits first battery powered crane

Sims Crane & Equipment is showcasing the world's first battery powered crawler crane at its corporate headquarters in Tampa, FL.

"We are honored to partner with Liebherr and be on the forefront to serve a vastly growing need for alternative energy," said Jackson Sims, vice president, Sims Crane & Equipment.

The crawler crane's battery powered engine cuts local carbon emissions completely, and can operate for eight hours unplugged, or for an unlimited amount of time when connected to a power source,

the company said.

The new crawler crane is also significantly quieter than its diesel counterpart, according to Liebherr. ■

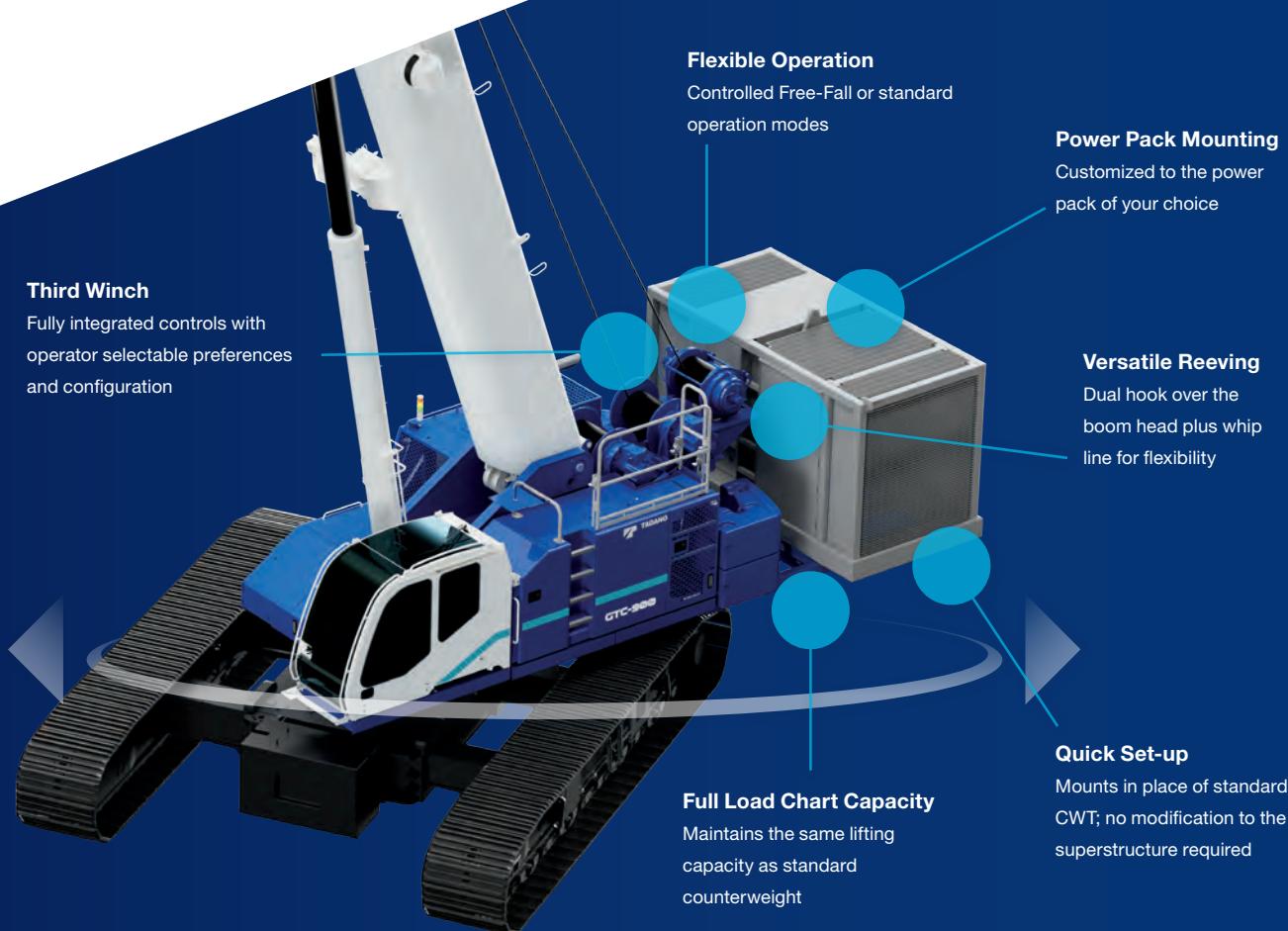
**The battery powered crawler crane joins Sims' rental fleet, which is the largest fleet in Florida.**



■ Celebrating its 10th anniversary this year, the **Liebherr** Miami location is now the central hub for the company's maritime cranes, tower cranes as well as refrigeration and freezing.

■ **Maxim Crane Works Holdings** Capital unveiled the pricing of \$500 million aggregate principal amount of 11.50 percent Second-Priority Senior Secured Notes due 2028. Maxim received an upgraded corporate credit rating from Moody's, from B3 to B2.

BITS



# THIRD WINCH AND POWER PACK

## GTCs CREATING THE FOUNDATION FOR SUCCESS

The Tadano GTC lineup now has some additional foundation options for road and bridge builders, a Third Winch and Power Pack Mounting. In fact, Tadano is the only OEM offering the Third Winch option and an Integrated Power Pack Mounting on a Teleboom Crawler Crane. These versatile machines are already known for their full load chart pick-and-carry, quick setup, auto-switching load charts and superior travel performance. And now, Tadano can help you score another utilization win with two options previously not seen on Teleboom Crawler Cranes.



# Deep roots,

Born into a family of equipment industry entrepreneurs, **Don Udelson** built Lift Source Machinery from the ground up. **D. Ann Shiffler** reports.

**D**on Udelson, CEO and owner of Lift Source Machinery, has deep roots in the construction industry. Over the past 100 years, his family's business journey has taken diverse paths.

"It all began with the first-generation American Udelson brothers founding a Cleveland-based contracting company in the early 1920s," he said. "Their venture saw steady growth, which included contributions to iconic projects like the Terminal Tower and Municipal Stadium. After World War II, my grandfather, Edward Udelson, recognized new opportunities in entrepreneurship. He

shifted away from contracting, establishing Udelson Equipment Company (UECO), with the goal of becoming a world-leading provider of cranes, machinery and trucks."

## An industry force

Not long after, Don's father Alan and uncle David joined the company, and the business quickly became an industry force, he said.

"And they mentored me extensively," he said. "From sweeping shop floors in my grade school years to managing UECO's Texas operations, I learned the industry inside out. In the early 1990s, we ventured into the bare rental market. With a team of around 175, including ten Udelson family members, UECO expanded across the U.S. and became one of the largest independent, family-owned operations in the industry until United Rentals (URI) acquired UECO in 1999, marking a significant milestone in our journey."

Udelson stayed with United Rentals for a while, gaining what he termed "valuable experience." But in 2001 he decided to go out on his own, establishing Lift Source Machinery and focusing solely on the crane industry.

The company's first focus was building a fleet of rough terrain cranes, which quickly grew to more than 150 units working throughout North America as well as Latin America and Australia.

"As customer requests for the application of our business model to all terrains and crawlers grew, we began adding these to our fleet mix," Udelson said. "Following an early career stint in the investment banking sector, my son-in-law Justin LaPoten, accompanied me to the 2017 ConExpo to get a sense of what I do."

With great enthusiasm, Udelson said, LaPoten joined the company in 2018. In 2021, he became a partner in LSM.

"In 2021, Justin was named one of the Specialized Carriers and Rigging Association's 4 Under 40, which 'recognizes the insight, vision and wherewithal synonymous with SC&RA leaders over the decades,' Udelson said proudly.

Don has been a force in the crane industry for many years, and he is esteemed for his market insight and crane knowledge. He has built a brand that is recognized and respected.

We asked him to answer our questions,

**Lift Source Machinery targets the 100 to 900-ton capacity market. CEO Don Udelson said this business model allows their small staff to manage the higher capacity fleet while minimizing client downtime.**



# new heights



**DON UDELSON,**  
Founder and CEO,  
Lift Source Machinery

“What keeps me engaged in the crane industry is its inherently competitive nature and ever-evolving landscape. It’s a field where every day presents new challenges and opportunities. The constant drive to improve, innovate and stay ahead of the curve is invigorating.”

and he did so with clarity and purpose. I think you will be interested in what he has to say.

**UNITED RENTALS PURCHASED YOUR FAMILY’S BUSINESS, UECO, IN 1999. INITIALLY, YOU WORKED FOR THEM FOR A COUPLE OF YEARS. WHAT MADE YOU DECIDE TO START LIFT SOURCE MACHINERY?**

United Rentals is a great company, but I was raised by a family of entrepreneurs, and it’s in my blood. I felt constrained at URI. I wanted to build something from the ground up. The experience at URI, coupled with my years at UECO, gave me the perspective to recognize the advantages of running a nimble business with the ability to structure personalized deals to help customers work through their own unique fleet challenges.

**WHAT LED YOU TO FOCUS ON THE LIFTING SECTOR, SPECIFICALLY A CRANE FLEET?**

In my career, with exposure to various types of heavy construction equipment, cranes stand apart due to their relatively low wear and tear, minimal impact and stress during operations. This type of operation generally extends equipment lifespans and reduces maintenance costs, aligning with our focus on agility, sustainability and operational efficiency. The specialized nature of crane operations, the technical expertise required, the focus on safety and their critical role in various industries contribute to maintaining a crane’s value and boosting profitability for companies like ours with a well-maintained and diverse crane fleet.

**WHAT DISTINGUISHES LIFT SOURCE MACHINERY IN THE MARKETS IT SERVES?**

What truly sets us apart, our niche in the market, if you will, is our specialization in Rental Purchase Options (RPOs) and the unique flexibility we offer our clients. It’s what we call our “white label” solution. Our approach is collaborative rather than transactional. By truly understanding our clients’ needs and goals, we develop tailored solutions that go beyond equipment rental – we become strategic partners in their success. We work with each customer individually to craft a structure that suits their needs,

whether pure “rent-to-rent” or RPO.

We collaborate with some of the largest crane companies in the world, as well as smaller early-stage businesses, giving them the ability to provide crane services under their own brand. This highlights our adaptability and willingness to work collaboratively with our customers. We serve as a core supplier to some and a swing supplier to others. Eventually, most crane companies will find our model advantageous in increasing their capacity while helping to manage their balance sheet.

**YOU HAVE A LOT OF DIFFERENT CRANES IN YOUR FLEET, PREDOMINANTLY THE TADANO AND LIEBHERR BRANDS. WHAT LED YOU TO FOCUS ON THESE BRANDS?**

Our decision to incorporate Liebherr and Tadano cranes into our fleet was the result of a thorough evaluation of various factors, including cost of ownership, which underscored their status as top-tier brands within the crane industry. Over time, I’ve witnessed Liebherr and Tadano consistently demonstrate a history of engineering excellence, durability, reliability, technological innovation and robust product support. These brands have solidified their positions as global industry leaders by consistently delivering crane solutions known for their exceptional quality and pioneering innovations. This commitment to excellence aligns perfectly with our mission to provide top-notch cranes to our clients worldwide.

**WHAT ARE YOUR CORE MARKETS/CUSTOMERS?**

LSM’s primary clients are crane companies that rely on LSM when job requirements stretch their fleets and capital limits. The typical LSM customer supports industries such as oil and gas, infrastructure, petrochemicals, heavy civil and commercial and power generation and transmission. We are customer-focused and enjoy helping both up-and-coming and established crane companies overcome obstacles to growth.

**WHAT IS IT ABOUT THE CRANE INDUSTRY THAT KEEPS YOU ENGAGED?**

What keeps me engaged in the crane

>12



industry is its inherently competitive nature and ever-evolving landscape. It's a field where every day presents new challenges and opportunities. The constant drive to improve, innovate and stay ahead of the curve is invigorating. Whether it's adapting to emerging technologies, finding more efficient ways to handle heavy lifting, or navigating complex logistical puzzles, there's always something exciting happening in this industry. It's this dynamic and competitive environment that keeps me motivated and eager to be a part of the crane industry's evolving journey.

## WHAT IS YOUR ADVICE WHEN IT COMES TO RUNNING A SUCCESSFUL FAMILY BUSINESS?

A common thread among successful family businesses is a culture that emphasizes stability and long-term visibility over short-term wins. Hence, we plan and implement accordingly. This long-term view permeates throughout LSM's relationships with customers, vendors and employees alike, with a goal of success for all. With an eye on doing the right thing and creating win-win strategies, our family has continuously built multi-generational relationships in the industry. For example, in 1952, my grandfather met Mr. P.L. (Pete) Baris, a European businessman. Together, they began an international commercial relationship that continues today, into each family's third and fourth generations (Baris-Livnat & Udelson-LaPoten). Moreover, the Udelson family has historically employed generations of other families. Several client relationships span generations as well. Lastly, consistently doing small and easy things over a long period of time is extremely powerful – the simple things like returning calls and emails promptly, not overpromising, fulfilling your commitments and being honest, even when things go wrong.

## HOW WOULD YOU CATEGORIZE THE MARKET FOR CRANE RENTAL AS 2023 WINDS DOWN?

As we approach the end of 2023, I hold an optimistic outlook for the industrial and energy markets in the coming years. The recent passage of the infrastructure bill, along with the Inflation Reduction Act, which allocates substantial stimulus funds – amounting to hundreds of millions of dollars – for renewable energy endeavors like wind farms and biodiesel plants, serves as a promising catalyst.

Additionally, the Energy Information Administration has adjusted up its



Justin LaPoten  
and Don Udelson  
at Bauma 2022 in  
Munich, Germany.

projections for peak oil demand, and the Permian Basin is currently experiencing unprecedented activity. While the demand side of the industry remains robust, we must remain vigilant as we navigate challenges such as global conflicts, inflation and escalating interest rates, requiring strategic planning for the road ahead.

## AS A FOURTH-GENERATION FAMILY BUSINESS, WHAT IS YOUR BEST ADVICE FOR ATTRACTING YOUNGER PEOPLE TO THE INDUSTRY?

My best advice for attracting younger people to the industry is to foster a culture of diversity, mentorship and education. We need to actively demonstrate to the next generation the wide range of opportunities and diverse skill sets required to succeed in our field. Embracing technological advancements and harnessing the power of social media to showcase the exciting projects that cranes are integral to can help make the industry more appealing and relevant to younger individuals.

Additionally, companies should take advantage of programs like the SC&RA Leadership Program, which offers a valuable platform for networking, knowledge sharing and building strong connections within the industry. By offering mentorship, highlighting innovation and providing opportunities for professional growth, we can make the crane industry an attractive and fulfilling choice for the younger generation.

## IN JUNE'S ACT 100, LIFT SOURCE MACHINERY CLIMBED THE RANKS FROM 26 TO 18. WHAT FACTORS CAN YOU ATTRIBUTE TO THIS IMPRESSIVE GROWTH?

While we haven't increased beyond our peak total unit number, our total fleet

capacity has really leaped. In our early years, with a rough terrain crane-heavy fleet, our average unit was around 70 tons with an average age of 40 months. We now target the 100 to 900-ton market. Our average unit today is approximately 250 tons, with an average fleet age of less than 30 months. This business model allows our relatively small staff to effectively manage the much larger capacity fleet while minimizing client downtime.

Moreover, it gives clients the opportunity to increase their fleet capacity with young, quality cranes, either temporarily through renting or long-term through rent-to-own agreements. This approach enables us to remain nimble and affords Justin or myself the time to be involved in every transaction. It's a personalized approach in which our customers don't have to deal with corporate red tape to get a deal done.

## THIS INDUSTRY OFFERS UNIQUE TRAVEL OPPORTUNITIES TO CHECK OUT NEW EQUIPMENT, MANUFACTURING FACILITIES AND TRADESHOWS. WHERE IS YOUR FAVORITE PLACE YOU HAVE VISITED?

I've been to several crane and machinery manufacturers' plants across the globe. Some were very impressive. However, as someone who has spent his life in and around the heavy machinery industry, the triennial Bauma in Munich is my favorite business trip. I always look forward to it with great anticipation. Thousands of exhibitors from around the globe showcase their latest and greatest products over nearly 6 million square feet of space. It presents a great opportunity to see the latest products in the crane industry and spend quality time with our industry colleagues – possibly while enjoying a Pils and Weisswurst. ■



Udelson Contracting's Marion steam-shovel and battery of Acme 5-ton trucks, circa 1920 in Cleveland, OH.



A white Liebherr rough terrain crane is shown in operation on a construction site. The crane's boom is extended high into the air, lifting a large, dark metal bucket. The crane is mounted on a heavy-duty chassis with outriggers deployed for stability. The background features a clear blue sky and a line of trees in the distance.

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with optional P-Pack bracket kit

A large Link-Belt 218V crawler crane is shown in a construction setting. The crane is white with red accents and features a lattice boom. It is equipped with a large red counterweight stack on the rear. The crane is positioned on a gravel surface with trees in the background.

# 218|V

(FIVE)

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# Safeguarding slings

**Kris Koberg** and **Mike Close** discuss the many ways to ensure sling protection.

**N**ot using sling protection is a common rigging problem for all types of lifting slings – whether they are synthetic, wire rope, wire mesh or alloy chain. These slings need to be protected against edges, corners and protrusions to extend the sling's life and prevent catastrophic failure.

ITI Field Services Mike Parnell, who is ITI co-founder and senior consultant, explained that rigging accidents can often be traced back to the failure to use sling protection. Investigations found that of eight fatalities over a three-year period, the riggers selected the right type and capacity of sling for the application, but damage from cutting or friction resulted in sling failure.

Unfortunately, there is not a one-size-fits-all solution to protecting slings. This process of determining the right sling or cut protection requires heightened diligence by users.

Always use sling protection. While OSHA 1926.251(c)(9) and ASME B30.9 require synthetic slings to be protected, it is not mandatory for other types of slings. However, Mazzella's policy is that all types of slings be protected. Here's why.

Steel as well as synthetic slings can be damaged by rough, ribbed or uneven surfaces through abrasion. Abrasion can remove material or cause a weakening or failure of the sling. Heat from friction can cause additional damage to the sling, or could even damage the load. Even with an edge that may not seem sharp, slings can fail due to repeated exposure to an edge over time, load movement and sling pressure.

## Added protection

While all slings benefit from cut and abrasion protection, it is most common to see sling protection products being used with synthetic round or web slings because they are more susceptible to cutting than wire rope or chain. To put it simply, >16

“ Even with an edge that may not seem sharp, slings can fail due to repeated exposure to an edge over time, load movement and sling pressure. ”

## THE AUTHORS

**Kris Koberg** is CEO of DICA, which builds engineered outrigger pads and sling and ground protection products. **Mike Close** is marketing and communications manager of Mazzella Companies, a manufacturer and distributor of products in the overhead lifting and rigging industries.



When choosing sling protection, it is critical to understand that some sling protection is good for resistance to abrasion, while other protection is good for resistance to abrasion and cutting.



synthetic slings virtually always require added protection. However, even wire rope becomes fatigued and wires broken when the rope bends around the load.

If users are looking for references, First Sling's Linda Townsend advised, "ASME has published a Non-mandatory Appendix A on Sling Protection, included in the 2021 revision of B30.9 standard. In addition, the Web Sling and Tie Down Association provides recommendations in WSTDA-WS-2."

WSTDA recommends that a qualified person select and use appropriately engineered protectors/softeners using either commercially available products specifically designed to protect slings from damage or by having a qualified person design and construct custom protection.

"Slings should be rigged to avoid sliding of the load through the rigging or sliding of slings across surfaces," Parnell said. "Riggers should provide sling protection to avoid damage to slings at all times. Synthetic rigging is especially susceptible to cutting, crushing and friction damage."

In fact, loads themselves sometimes need to be protected from the slings, especially if the surface is polished or highly finished. When any sling makes direct contact with load, it can result in scratches, crushing, dents or damage to the load. This often happens when the sling is rigged in a choker or basket hitch.

## Types of sling protection

The days of using rags, cardboard, leather pieces or firehose should be gone. These materials are not intended for use as a protection device, and a properly trained and qualified rigger would know that these materials have not been evaluated for this type of use.

Instead, a variety of manufacturers offer corner pads, wear pads, covers or sleeves or reinforced lifting eyes that are designed to stand up to the needs of the lift, the surface of the load and the operating environment. Mazzella partners with many of the leading innovators in the

**A variety of manufacturers offer corner pads, wear pads, covers or sleeves or reinforced lifting eyes that are designed to stand up to the needs of the lift, the surface of the load and the operating environment.**



industry to offer sling protection products like DICA's LiftGuard, the Slingmax CornerMax products and Synthetic Armor products and Cortland's various lines of synthetic rope protection products.

When choosing sling protection, it is critical to understand that some sling protection is good for resistance to abrasion, while other protection is good for resistance to abrasion and cutting.

Wear pads act as a buffer between the load and the sling along the points of contact, while a sleeve wraps completely around

the sling, creating a "tunnel" of protection between the sling and the edges of a load. However, true cut protection can only be accomplished by eliminating the corner or edge. Note that a corner or edge does not have to be considered "sharp" in order to cause a sling to be damaged.

DICA's LiftGuard is different because it provides a new surface that is smooth and rounded that goes between the load and the sling, eliminating the edge or corner, instead of providing padding or extra layers of wear protection. LiftGuard Corner, Plate & Beam and Steel Coil protectors provide cut protection. Maximum capacity is achieved when the protectors are in full contact with the load, and the sling is in full contact with LiftGuard.

Medium and heavy duty LiftGuard corner protectors are designed for use with 90-degree corners. Beam and plate models

**Unlike slings, standards for the design and inspection of sling protection products do not currently exist.**



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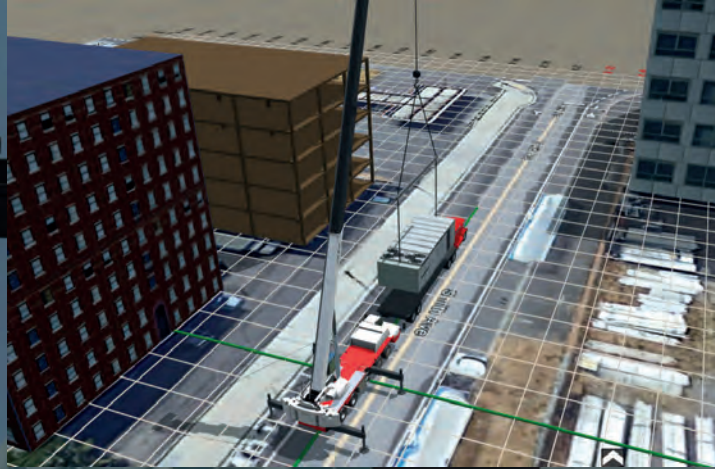




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## For more info

Additional resources can be found by visiting these websites:

- ITI's Sling Protection eBook
- Mazzella's Sling Protection Blog
- WSTDA's Recommended Standards for Synthetic Polyester Roundslings and Synthetic Web Slings

Steel and synthetic slings can be damaged by rough, ribbed or uneven surfaces through abrasion.

are designed for use with horizontal edges such as I-beams, and the groove must fit snug on all three interior surfaces of the plate or beam. Units designed for lifting coils of steel feature a convex surface and are designed to be used inside the bore or center of a steel coil.

### Refer to usage criteria

Unlike slings, standards for the design and inspection of sling protection products do not currently exist. Users should refer to manufacturer guidelines for usage

criteria and inspection of sling protection products.

"The issue is not being ignored by standards groups," said First Sling's Townsend, who is a member of the ASME B30.9 Committee. "There is a need to educate the public on the difference between abrasion protection and cut protection. I anticipate that future revisions of the standard will include information on wear protection. Among the items I hope will be addressed are standards for identifying size and load

ratings and whether the sling protection provides cut or abrasion protection."

Because there's a difference between abrasion-resistant protection and cut-resistant protection, be sure to identify the type of sling protection that is the best fit for the application.

Riggers should be trained to understand and recognize the damage potential to the sling in the application, considering the type of sling, rigging method and sling angles and physical attributes of the load, including its weight, shape and profile and materials. A qualified person, the sling manufacturer, or the sling protection manufacturer can all be involved in determining suitable sling protection for each lifting application. ■



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**ACT** rounds up some extra specialized rigging projects throughout North America.

# Beyond

**R**igging challenges are nothing new to the specialized lifting and rigging industry. The companies thrive on projects that seem impossible. They often require high level engineering expertise, and even reverse engineering.

Finding the right and safe process and equipment to lift, move and install equipment in challenging environments offers a sense of satisfaction that keeps these teams looking for the next rigging problem to solve.

ACT rounded up eight rigging jobs around the country that represent innovation at its highest level.

## Riverboat launch

Launching a riverboat was a thought-provoking process for Barnhart's Mandan, ND branch, which was hired to provide engineering, crane and transport solutions for the project, that was part of a casino and lodge, in New Town, ND.

The 80-foot boat riverboat was delivered to New Town in eight pieces. It was fully



Two 40/60 Versa-Lifts were used to unload the press and stage it inside the building.

## Pressed for space

MEI Rigging & Crating was approached by a manufacturing company that was assessing the feasibility of installing a 60,000-pound press. The primary concern was the height inside the building, as they preferred not to cut a hole in the roof. After evaluating the requirements, MEI proposed an innovative alternative solution using Versa-Lift forklifts.

To execute the installation, the MEI team utilized two 40/60 Versa-Lifts to unload the press from the truck and stage it inside the building. Once the press was on the ground, the rigging crew utilized boom attachments and rigged the top of the press in preparation for lifting. Ensuring stability, the crew had another forklift positioned at the bottom of the press. With the necessary precautions in place, the MEI crew began the lifting process, raising the press straight up and eventually standing it upright.

After achieving the desired position, the crew carefully maneuvered the press into place as directed by the manufacturing company.

MEI Rigging & Crating constantly seeks to provide new and innovative solutions to their customer's problems and needs to earn and keep their business, the company said.

constructed on site about a quarter mile from the lake. This was her first launch.

Beyond the many rigging challenges to master, the boat and crane had to be transported down a 16.8 percent grade to reach the launch at Lake Sakakawea. Plus, the boat's interior was not fully outfitted when the project took place.

The center of gravity (CG) had been estimated, but Barnhart decided to include hydraulically adjustable tension links in the rigging to have the ability to level the boat in case the actual CG was offset from the theoretical location.

The shell plate of the hull was only a quarter-inch thick. To avoid damaging the thin plate, the transverse slings under the hull had to be positioned at predetermined locations at internal frames and bulkheads. In addition, the profile of the hull changed along the length of the boat. This required a significant amount of engineering to



# specialized rigging



**Barnhart used hydraulically adjusted tension links in the rigging to be able to level the boat in the event the actual center of gravity was offset from the theoretical location.**

calculate precise rigging lengths for the support points. Adjustable rigging and multiple spreader bars were engineered to accommodate this lift.

Barnhart utilized their Terex CC 2800-1 SSL, 300Kip and 120Kip Tension links. The riverboat was transported several

hundred yards down the steep incline on a double wide 12-line Goldhofer PST. The crane with counterweight was walked down the same incline to the second crane pad.

The riverboat was lifted off the Goldhofer and successfully set in Lake Sakakawea.

>23

**Precise engineering was required to determine where the slings should be positioned.**





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By adding additional skid shoes, the Hydra-Slide's 500-ton capacity was increased to 750 tons.



## Railroad bridge switchout

L.G. Barcus & Sons was tasked with replacing an old railroad bridge with a new 135-foot, 536-ton steel span within just 22 hours. Traditional lift plans were deemed unsuitable due to weight and headroom issues.

The plan was altered to utilize a Hydra-Slide Skidding System, provided by LGH. By adding additional skid shoes, the Hydra-Slide's 500-ton capacity was increased to 750 tons.

The team built the new bridge atop Hydra-Slide track sections, employing special steel frames around each bearing pad. Additional support was created with h-piles, steel caps and temporary footings. The old bridge was cleared, making way for the new structure.

Two synchronized Hydra-Pac systems powered the sliding process. Within around 30 minutes, the bridge was correctly positioned. Hydraulic jacks lifted the bridge off the Hydra-Slide. The team then removed the tracks and lowered the bridge into place. The final step included installing two 50-foot steel spans on either side of the new bridge.

The success of the LGH and Hydra-Slide collaboration allowed L.G. Barcus & Sons to meet the customer's tight deadline without any issues.

Superintendent Marshall Chambers praised the Hydra-Slide's effectiveness, noting that it was easier to use than traditional cranes.

"This project's success showcases LGH's ability to help you tackle complex rigging challenges in any industry," stated the LGH team.

## Switching gears

A major utility provider contacted Edwards Moving & Rigging to devise a plan to place seven Switch Gear packages into a second-floor building at a site near Cincinnati, OH. Even though the Switch Gear components were relatively light, ranging from 6,000 to 20,500 pounds, the challenge of getting them from a flatbed to the point of final placement in a very restricted location required a detailed, creative and innovative plan by the Edwards engineering team.

The obstacles to overcome on this project >24

**Vehicle tracking and swept path analysis enabled the team to choose the most efficient route and to preemptively identify and mitigate problematic sections of the 50-mile route.**



## Saddling up a slug catcher

Buckingham Heavy Transport was contracted to assist with the delivery of a 450,000-pound slug catcher from a bulkhead on the Ohio River to its destination site 50 miles west of the river in Ohio. The Buckingham team pulled permits for a gross weight of 756,000 pounds and configured a transport plan which incorporated custom steel saddles, a Goldhofer PST/E trailer, a 500-ton gantry and two trucks and 12 axles of Goldhofer dual-lane trailer to handle the various challenges of the delivery route.

The slug catcher was transported via barge for the first stage of the journey. Buckingham designed and fabricated steel saddles and shipped them to the heavy haul company that was handling the transport to the barge in Texas. The saddles allowed the cylindrical slug catcher to be safely positioned on its side for transport, which would reduce load height and eliminate extra permitting and line fees for the overland sections of the route. When the barge arrived at the bulkhead, the barge crew offloaded the slug catcher by crane to Buckingham's Goldhofer PST/E trailer, which could navigate the steep grade and sharp turn required to exit the bulkhead. In a gravel staging area at the top of the grade, Buckingham used a 500-ton gantry system to transload the 66 by 13 by 14-foot slug catcher from the Goldhofer PST/E trailer to the 12 axles of Goldhofer dual-lane trailer which they would use for the main portion of the transport.

The overland transport route was hilly with narrow roads and multiple tight turns. Buckingham's vehicle tracking and swept path analysis enabled the team to choose the most efficient route for the delivery and to preemptively identify and mitigate problematic sections of the 50-mile route. The combined 1210 horsepower in the two Kenworth W-990 trucks

were put to good use, pushing and pulling the 110-foot long, 16-foot-wide trailer up the hills heading northwest towards the destination. The transport was completed without events, and at the site, crane operators offloaded the slug catcher to its final location.

**Buckingham used a 500-ton gantry system to transload the 66-foot slug catcher.**







**Project obstacles included overhead lines above the opening into the building, restricted space in the switch gear yard, a tight and off-center opening, low ground pressure and equipment inside the building had to be moved around by hand.**

included overhead lines directly above the opening into the building, restricted space in the switch gear yard, a tight second floor opening that was off center, low allowable ground pressure on the second floor, and all equipment inside the building had to be moved around by hand.

The accessibility limitations required an agreement with an adjacent property owner to allow a crane on their property from which all rigging gear and the Switch Gear units would be offloaded from a flatbed and placed onto utility property.

The crane first set up Edwards' 500-ton

capacity gantry, which would serve as the base for a moving platform. The gantry legs were placed on a track positioned over load spreading mats. This design facilitated movement from the fence on the boundary nearest the crane to the second-floor opening.

Edwards built a special sliding frame on which to place the Switch Gear. The frame allowed the components with an open bottom to be slid as needed, and since there were no jack lugs on the Switch Gear, the frame was used for jacking operations as required to remove the slide system and reinstall it for the next unit. As the trucks brought the Switch Gear onto the adjacent property, the crane picked them and placed them on the work platform.

Edwards then trolleyed the load to the side opening in the second floor. To transition the Switch Gear into the building, Edwards used a combination of aluminum beams and Hydra-slide Extreme Low-Profile Slide to move them from the platform through the second-floor opening.

The inside of the structure was carefully marked to ensure any jacking took place over a floor joist or beams that bridged multiple joists. The team transitioned from heavier beams on the platform to lighter beams inside. No material handling equipment was accessible on the second

**The final portion of the scope was to move all Switch Gear to the center of the building, and set them into final position.**



## Shallow pit challenge

DHGC was contracted through Schuler to install a five-stand press line. The presses were 1,200 to 2,500 metric tons.

The pit was only 5 meters deep instead of the standard 6 meters. As a result, to clear the tie rods DHGC had to put its gantry on 6-foot stands and use 30-inches for a total height of 9 feet.

Crown shipments were delayed 5 weeks forcing DHGC to prebuild all but four presses. A result they had to travel 160 feet with 430,000 pounds at a height over 40 feet. The team managed to reduce the 5-week lost time down to 3 weeks.

Equipment used included RGS 5400 towers, 50 and 30-foot box beams, 250-ton side shifts, Hoist 40/60, Hoist 25/35 and a 4-ILine SPMT.



**DHGC installed a five-stand press line in a shallow 5-meter-deep pit.**

floor due to the ground bearing issue, making lighter equipment essential to the operation. All seven Switch Gear units were staged in alignment on temporary material.

The final portion of the scope was to move all Switch Gear to the center of the building, and set them into final position, with all staging material removed. The Edwards engineering team designed a system utilizing an internally fabricated gantry, featuring hollows jacks. The gantry was skated into position, each Switch Gear component in turn was slid under the gantry via the low-profile slide.

Once in position, the hollow jacks were positioned directly over the lift points on the Switch Gear. The Switch Gear was elevated, the dunnage removed and final set was completed. The Edwards team completed the project without incident and with an undamaged floor due to strict adherence to a comprehensive and carefully crafted engineering procedure.

>27



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**Engineered Rigging worked with RLT Engineering to determine that a strand jack system was the best solution for dismantling three container cranes at a port in Virginia.**

### Container cranes takedown

When three ship-to-shore container cranes at a Virginia port were due for demolition, an innovative solution was needed to ensure a controlled dismantling. Engineered Rigging (ER) worked with RLT Engineering to determine that an 800-metric ton strand jack system was the best solution.

A set of four 200-ton strand jacks, four hydraulic pumps, load anchors, wedges, strand and mounting grillage from ER's rental fleet would provide the lifting capacity to safely hold the main boom and trolley beam of the crane in place while it was cut free from the portal gantry legs. That entire section (inclusive of the main

front boom, mast, backstay bracing, machinery house, trolley beams, hoist, trolley, spreader and operator cabin) weighed about 600 tons.

To ensure proper load distribution, ER's certified equipment technicians engaged and checked the system load readings and then initiated adequate lifting pressure on the reinforced shoulder girders. Before the cutting process began, the team went over pre-project checks, held safety meetings and planned for the controlled lowering sequence from the 150-foot elevation to the bottom seaside and landside cross beams for further dismantling.

Once the upper cross beams were free

and clear, the technicians lowered the boom and trolley assembly until it was secure on the bottom landside and seaside cross beams. The loads for each jack were monitored throughout the synchronized lowering process by the SCC computer system. The boom segments were then secured to the bottom landside and seaside crossbeams so that the dismantling operations could begin.

The original strand jack system was then disassembled and reassembled for the next portal crane. The cutting and controlled lowering process was repeated until the booms from all three cranes were safely lowered and secure. ■

**The tie rods were set with a 75-ton Mobilift and Hoist 40/60, with inches to spare.**



### Mission impossible, almost

GICC was called in to take over a project that another rigging contractor could not perform. This was understandable because of interferences within a work area of 50-foot square area. As well, the scrape tunnel that ran through the area had no weight capacity, and the overhead cranes limited the height to just 33 feet. The pit was only 4 meters deep with no tie rod pockets.

GICC moved all equipment into place using its 4-line SPMT. The tie rods were set with a 75-ton Mobilift and a Hoist 40/60, with inches to spare.

Due to the overhead crane interference and the shallow pit depth, the team had to under pick the crown to set over tie rods.

"To maintain the schedule, we brought in two 140-ton capacity cranes to set the oil platform," the company said. "Once we figured out all the quirks, we set a press in six days."

Equipment used included two RGS 5400 towers, a 50-foot box beam, 250-ton side shifts, Hoist 40/60 lift truck, RGS 75-ton Mobilift and four lines of SPMT.



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**Hannah Sundermeyer**

reports that while simulator and virtual reality training are making progress, in-the-seat operator training is still vital.

# Bridging the gap

**A**s our industry continues to fight the battle against the labor shortage, training and training methods are always a hot-button topic. While simulator and virtual reality (VR) training technology continues to become more advanced, emphasis on “in the seat” training is still very important. Balancing the two, and implementing both hands-on and technological training is a crucial element of successful certification training.

## Uptick in usage

Industrial Training International (ITI) is paving the way for virtual training in the industry. The company utilizes virtual reality (VR) based crane simulators that were originally brought to market with a partner development studio. Additionally, ITI VR Crane & Equipment Simulators feature makes and models from leading original equipment manufacturers, who were brought into the development process to help ensure an experience on par with operating the exact machinery each simulation was designed to replicate.

ITI Simulations also offers an expansive VR training suite featuring varied scenarios and operator learning paths that provide the range of challenges and skill-building modules needed to turn beginners into experts.

“We’ve certainly seen an uptick in the usage and acceptance of simulator-based training as a viable education method over the past few years,” said ITI. “This can be attributed to a variety of industry factors including analyses such as an NCCCO Foundation-sponsored study on the efficacy of virtual reality VR Crane Simulation, which was conducted by a third-party psychometrician, which was published in 2020.”

ITI also cites the impact that the Covid-19 pandemic had on society, helping to prompt basically everyone to fast-forward ten years’ time in terms of willingness to adopt new forms of technology while in-person contact was limited.

“In addition to increased utilization of remote learning options, we watched as virtual reality adoption skyrocketed as it provided a training option when in-person sessions were not always possible,” the company added.

ITI believes that test candidates who have engaged in simulation training prior to taking a test score better than test candidates who have not had the opportunity to engage in simulation training. The study referenced previously found that a random sample of an operator’s score on a practice certification exam conducted in VR predicted the same

operator’s score on the actual exam to a 95 percent confidence interval.

## Working in tandem

Despite the emphasis on technological training, ITI still encourages in-the-seat training a vital necessity of operator preparation.

“We believe that operator seat time and experience is not only essential, but in truth the backbone of a competent crane operator,” said ITI. “That being said, what we encourage our industry mates to remember is that the goal has at no point been to replace in-the-seat training. The goal of simulation training is to work in tandem with traditional training methods by offering more seat time, reduce downtime and ultimately provide a safe and efficient learning environment – and thus play a role in reducing expenses while improving efficiency, and implement an enhanced training solution that compliments other forms of education for those who are new to the industry and/or working to remain current or even achieve new certifications.”

While it’s not one size fits all, the company believes that an optimal learning path is one that incorporates a combination of Instructor Led Training, eLearning, simulation time and time spent

>30



ITI believes that test candidates who have engaged in simulation training prior to taking a test score better than test candidates who have not had the opportunity to engage in simulation training. A random sample of scores on practice exams were about the same.



practicing and working on the actual equipment in the real world.

## A regular role

Inspired by the normalization and successes of flight simulators over the last ten years, CM Labs has been hoping to lead the way into a safer future where simulation plays a regular role in heavy equipment operator training.

With over 1,000 simulation installations in 39 countries, CM Labs offers a realistic experience through patented Smart Training Technology and a motion-enabled platform. The Simulation Training Packs provide a comprehensive immersive simulation learning program for the safe training and assessment of operators.

“But even though we are advocates for simulation, nothing will completely replace the real machine,” said Christa Fairchild, product marketing manager, CM Labs. “Operators must learn to know and expect every reaction out of the machines and be prepared for these reactions and movements. Simulation training helps prepare operators for those moments and is the bridge between theory and operating on the job.”

The CM Labs’ full-motion platform is tied, in real-time, to the simulation and accurately replicates much of an operator’s day-to-day experience, through the seat as well.

“Trainees improve their muscle memory ultimately to be ‘one’ with their equipment: feeling the platform bowing down as they drill or dig, pitching at risk of tipping or feeling engine vibrations through the seat to avoid choking the throttle,” said Fairchild. “The simulation replicates true engine sounds (including fails and stalls), variable engine RPMs, horns, scraping and shifting, alarms and other work site sounds that are important audio cues for safe, steady, deliberate and precise operations.”

In the future, CM Labs is expecting to see an increase in VR and simulator usage for certification and believes that simulator training is key to successful operators lasting in the construction industry.

CM Labs solutions include simulation exercises to prepare for certifications for Forklift, NCCCO and EICA for Digger Derrick, and NCCER and NCCCO testing for Cranes. Electrical Training Alliance (ETA), the curriculum arm for the International Brotherhood of Electrical Workers (IBEW), collaborated with CM Labs to add specialized training scenarios for utility industry certifications.

The simulation exercises, inspired by

the certification requirements, mirror exact applications, such as auger control, and pole control and setting, rather than generic scenarios. This translates directly into higher success rates as trainees are better prepared for both written and practical exams, the company said.

Whether simulated practical testing in North America will be accepted by certification bodies as equivalent to practical testing on real equipment is yet to be seen, the company said. But a 2020 study by NCCCO suggests that this type of testing is “a highly reliable measure for predicting a passing score on an actual crane.”

CM Labs also believes that the industry will see more training paths customized to fit individual operator learning profiles.

“Today’s simulators are data and analytics-driven, which is essential to optimizing training time and correcting unsafe behaviors,” said Fairchild. “This means that training techniques move away from a checklist approach, and instead target specific skills that make people more efficient and safer.”

## Supplementing training

Stephenson Equipment offers several classroom training facilities and practical training facilities in Pennsylvania. The company has previous experience utilizing VR technology to supplement hands-on training classes, but believes that even when using a simulator, potential operators should be given instruction concerning how to operate a crane.

“The issue is, VR can be used to supplement hands-on training, but we realized, candidates that are desiring to learn to operate a crane need to be in the crane,” said Ray Feidt, corporate inspection/training manager, Stephenson Equipment. “As good as VR is, it just cannot replace real seat time with instruction.”



**With over 1,000 simulation installations in 39 countries, CM Labs offers a realistic experience through its Smart Training Technology.**

Feidt said it is also impossible to recover the cost of a VR simulator.

“Where it will work is if a contractor wants to get their potential crane operators practice time and not have to use a crane,” he added. “Contractors wouldn’t be concerned about making money with it. Does VR have its place? Probably. Is it good enough to replace seat time and actual operational instruction? No!”

Stephenson sees that most potential crane operators do not learn the techniques that are required to operate a crane efficiently and safely just by practicing on their own. There still remains a significant need for in-person and in-the-seat instruction.

“With instruction, potential crane operators learn the proper techniques so when they do practice, they practice working on the proper techniques,” added Feidt. “Then they hone their skills to the point where applying the techniques becomes automatic. So, even using a VR simulator, potential operators should be given instruction concerning how to operate a crane.”

**Stephenson Equipment believes in a more traditional approach, and offers several classroom and practical training facilities.**





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Dual-rated boom trucks give users two machines for the price of one. **D. Ann Shiffler** reports on how this hybrid crane/aerial has impacted such markets as utility and telecommunications.

The latest addition to the Altec line of dual-rated cranes is the AC65E-155S, which offers the highest capabilities of any dual-rated product on the market, according to the company. The AC40E-152S has a capacity of 40 tons and a platform capacity of 1,200 pounds.

In the realm of construction, it is a real win when one piece of equipment performs the work of two. Such is the case for dual-rated boom trucks, which can work as a crane and an aerial work platform (AWP). This is an especially attractive concept in the utility industry, which often needs to lift gear and people.

The concept of a dual-rated crane was first introduced in 2014 by Altec, a well-known supplier to the utility sector. Manitex International followed Altec into the market, and for a time Manitowoc's National boom truck brand offered dual-rated cranes. Dual-rated cranes are primarily used in powerline construction, which routinely utilizes long reach cranes and aerials.

### Single equipment solution

Altec saw the opportunity to better support the electric utility industry with a single equipment solution that would allow customers to utilize a boom truck to put personnel in the air, according to Zak Hilliard, Altec Cranes market manager. The Altec AC40-152S was the market's first dual-rated boom truck.

"Since then, dual-rated products have gained wide popularity because they provide an economical, safe and efficient way to put people as high in the air as possible with a single product," Hilliard said. "While there are other solutions that offer the same height, they can be prohibitively expensive. Also, dual-rated products allow you to save time on setup."

Altec offers three dual-rated boom truck cranes. The latest addition is the AC65E-155S, which offers the highest capabilities of any dual-rated product on the market, Hilliard said. The AC40E-152S has a capacity of 40 tons and a platform capacity of 1,200 pounds. The AC45E-127S has a capacity of 45 tons and a platform capacity of 800 pounds. The new AC65E-155S has a capacity of 65 tons and a platform capacity of 1,200 pounds.

### Expanding markets

"We've seen the adoption of dual-rated cranes into other markets," Hilliard said. "Telecommunications customers have adopted them for tower erection and maintenance, especially as towers continue

# The new



Dual-rated boom trucks and truck cranes can work as a crane and an aerial work platform (AWP).

PHOTO: DIVERSIFIED PRODUCTS/LIFTWISE

to get taller and heavier. We've also seen them used by customers in the lights and signs market, with a small number of tree care users adopting them, as well."

The safety, efficiency and cost savings make dual-rated boom trucks a popular solution with customers.

"Being dual-rated means that unit has to be designed and tested using two sets of design standards, which give the customer confidence it's a safe solution in both work applications," said Hilliard. "On the efficiency side, a test-lift is not needed when using a dual-rated crane for aerial work, only a test flight. These machines are cost effective and can allow customers to avoid the need for a specialized high-reach A92.2 rated-only aerial device."

For a crane to be considered dual rated, it has to be configured with certain options.

"For the machine to use its dual rating, it has to have a platform attached to the boom or jib tip, and it has to have a radio remote, in addition to other unit features," Hilliard said. "Each dual-rated





# multi-taskers



“Customers and fleet owners appreciate the dual-rating feature and how it improves job efficiencies and equipment utilization.”

**RANDY ROBERTSON, Manitex International**

crane product that Altec offers has its own specifically engineered platform to attach to it.”

Hilliard said Altec has seen strong demand in its core markets, and demand is increasing steadily in telecom applications. Altec recently improved its dual-rated product with the introduction of the E-Series control system. The electric-over-hydraulic controls allow for new levels of machine smoothness and predictability, as well as more predictable and consistent radio remote performance, Hilliard said. Altec also recently launched an insulating jib that is intended to be adapted to an A92.2 product.

## Voice of the customer

Manitex introduced its first dual-rated model, the TC50155HL, in 2015, after listening closely to the needs of customers, according to Sales Director Randy Robertson. Other models that followed include the TC45142/ TC40142, TC50155/ TC50155HL and most recently the TC65131 and TC65159. All models feature a 1,200-pound quick attach basket.

“Dual-rated boom trucks/truck-mounted cranes are a product of listening to the needs of contractors and fleet owners to provide more efficiency in the construction of new transmission lines, telecommunications upgrades and other hi reach applications,” Robertson said. “Manitex designed an exclusive solution for select TC Series models whereby the crane’s electro-hydraulic operating systems and software change internal parameters when personnel basket mode is selected.”

The TC65159 offers up to 214 feet of boom and the TC65131 up to 194 feet aerial working height when equipped with optional jib.

“Manitex produces its own proprietary baskets that include a quick attach feature making set up quick and efficient,” said

Robertson. “The baskets also include 360-degree rotation with no external hydraulics or cable to tangle or leak.”

**The Manitex TC65159 offers up to 214 feet of reach. Manitex makes its own proprietary 1,200-pound quick attach basket as well as a 360 degree rotation.**



## Market momentum

Robertson said the main markets for dual-rated boom trucks are in the power line construction and telecommunications sectors. The market for these units is growing and should expand even more with the federal infrastructure bill and those projects coming online. The legislation includes monies for thousands of miles of new transmission lines on new and existing right of way.

“Customers and fleet owners appreciate the dual-rating feature and how it improves job efficiencies and equipment utilization,”

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## Personnel lifting market

All boom truck manufacturers offer some type of personnel lifting device, whether it is using a dual-rated machine or a purpose-built aerial work platform. This has opened up the market for personnel platforms and man baskets.

Kyle Haskell, owner, Lakeshore Industrial, said he would characterize the market for man baskets as "very random" in terms of busy versus slow periods but also very consistent year to year in terms of sales volume.

"We supply for all sorts of markets all over the world but the major markets are in construction and to crane and rigging companies," he said. "At Lakeshore Industrial we have our standard models but we will also work to fit the needs of our customer as long as what they are asking for falls within OSHA standards."

Diversified Product Development supplies products to adapt to more than 20 different manufacturers, said Heather Steele, marketing strategist.

"Our typical customer base is a mixture of equipment distributors and crane owners," Steele said.

Based on its long history in the utility sector, Load King generally produces its own baskets for its product line. Vice President John Lukow said they offer a specialized luffing attachment for the PL-180 aerial that can be controlled from the operator's station or via remote control.

Elliott Equipment users prefer to outfit their Elliott cranes and aeri- als with Elliott OEM personnel platforms, the company said.

Altec produces its own line of propriety man baskets and related personnel lifting equipment.

Manitex also produces its own baskets that include a quick-attach feature as well as a 360-degree rotation.

Dual-rated cranes can be fitted with a variety of personnel lifters.



Robertson said. "Use of dual-rated cranes does not preclude the operator from performing an empty basket trial lift before lifting personnel."

Depending on the user, Robertson said some do use the machine as an aerial device and crane on the same job on the same day.

"It all depends on the user and their own internal policies," Robertson explained. "It

is important to mention that dual rating features in no way substitute for proper and safe judgement, on-site planning, trial lifts and following all federal and local requirements."

Not all boom truck manufacturers offer dual-rated products, and a couple of those that do not offer these machines have strong reasons for not entering this market.

The dual-rated crane discussion continues in our "On the flip side" article that follows on page 34.



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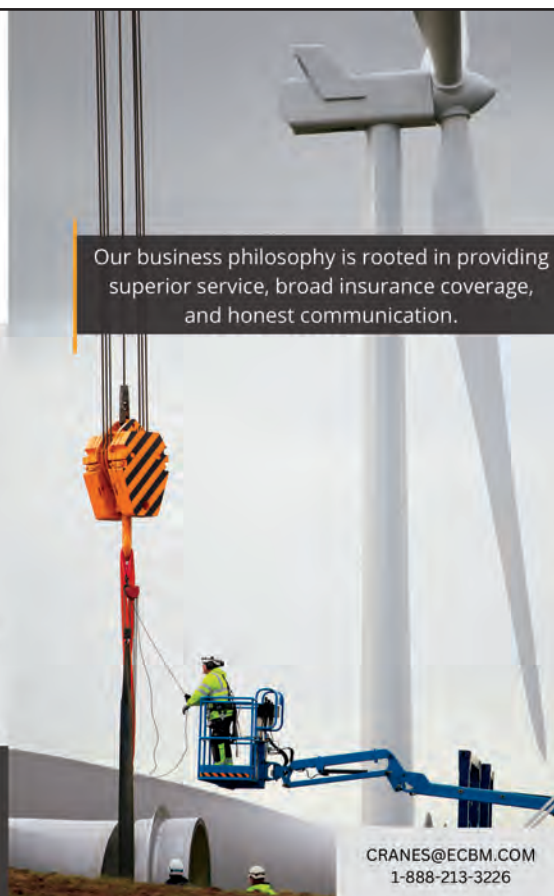
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Elliott Equipment's boom trucks are certified as ASME B30.5 mobile cranes, and its E-Line and HiReach aeri- als are certified as ANSI A92.2 vehicle-mounted aerial devices.

Elliott Equipment and Load King produce boom trucks and aeri- als as separate machines.

**D. Ann Shiffler** reports.



# On the flip side

**S**ome boom truck manufacturers dispute the concept of a dual-rated crane, preferring to manufacture boom trucks and aerial devices as separate machines.

"To put dual-rating in context, one must understand the various standards and interests at play," said Jim Glazer, president of Elliott Equipment. "ASME B30.5 is the standard for the design, inspection, testing, maintenance and operation of mobile cranes. ASME B30.23 is the standard that covers lifting people with cranes. ANSI A92.2 is the standard for the design, inspection, testing, maintenance and operation of vehicle-mounted aerial devices. ASME B30.5 (and ASME B30.23)

and ANSI A92.2 are mutually exclusive standards and do not recognize each other. There is no industry guidance or regulation on what design or testing parameters apply to a dual-rated crane."

OSHA requires that users perform a trial lift (using a platform with test weights to go through the flight path that personnel will use) and proof test, prior to lifting personnel with cranes.

Glazer said vehicle-mounted aerial devices have more stringent design standards for structural components, stability and hydraulic burst pressure among others, and that vehicle-mounted aerial devices are not generally exposed to the loading that cranes are. As a result, equipment originally designed as vehicle-mounted aerial devices and self-propelled work platforms are exempt from the OSHA Crane Standards.

## Sticking with two machines

Glazer contends that there is no industry standard that covers the design, inspection, testing, maintenance and operation of a dual-rated crane.

In the absence of an industry standard, "Elliott does not want to create a false sense of security or confuse the operator prior to lifting personnel with a crane and does not currently offer a dual-rated crane," Glazer said. "Our boom trucks are certified as ASME B30.5 mobile cranes, and our E-Line and HiReach aeri- als are certified as ANSI A92.2 vehicle-mounted aerial devices."

Load King, a division of Custom Truck One Source, also does not offer dual-rated machines.

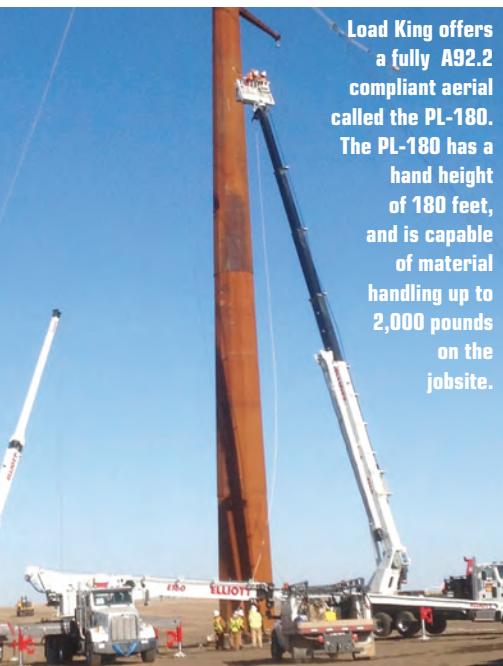
"We believe that the A92.2 and B30.5 standards are incompatible within the same machine," said John Lukow, senior vice president of Load King. "A machine should be designed, manufactured and operated under one or the other standard. Switching back and forth day to day or week to week is not rational. We believe the standards are clear. OSHA 29 C.F.R. section 1926.1431(h) requires operators conduct a trial lift before lifting personnel with a boom truck crane. However, section 1926.1401(c)(5) makes an exception for machinery originally designed as a vehicle-mounted aerial device. The dual-rated machines in the market are all originally designed and manufactured as B30.5 lifting cranes, and the dual rating is offered as an option for a fee."

Load King does offer a fully A92.2 compliant aerial called the PL-180, which has a hand height of 180 feet, and is capable of material handling up to 2,000 pounds. And if after a number of years in service, the owner of a PL-180 aerial device wishes to convert their machine, Load King will do that.

"Load King offers a one-way conversion of the PL-180 into a 50-ton crane," said Lukow. "The factory will provide updated load charts and remove the luffing attachment from the basket and perform stability testing of the machine to certify it as a B30.5 crane."

The 'dual-rating' of cranes is a complex issue with no easy answers, according to Elliott's Glazer.

"Ultimately, it is up to the equipment manufacturer to certify a machine to a specific standard," he said.



Load King offers a fully A92.2 compliant aerial called the PL-180. The PL-180 has a hand height of 180 feet, and is capable of material handling up to 2,000 pounds on the jobsite.

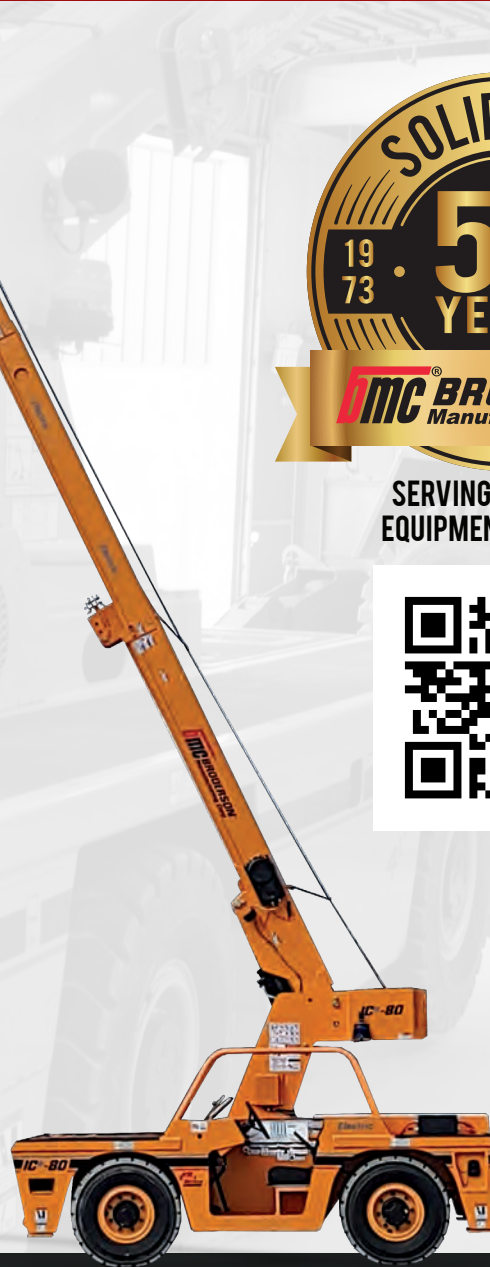


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# Tackling the job

**B**elow-the-hook products are continually evolving alongside rigging gear and equipment across the heavy lift spectrum. Often considered an extension of the hook, these devices are customizable for each lift, and bring efficiency and security to a project.

Attracting a variety of below-the-hook manufacturers and users, the Association of Wire Rope Fabricators General Meeting & PIE will be held October 15-18 in Dallas, TX. Throughout this article are our lists of select exhibitors and a preview of this highly anticipated rigging event. *ACT* also surveyed a variety of companies in the below-the-hook realm for information on their latest products for a variety of applications. Check it out!

## Load connection

The Caldwell Group has expanded its series of RUD ACP-Tornado lifting points, with Max and Supermax versions. A lifting point is a key below-the-hook product because it is the connection between the lifting gear and the load.

ACP stands for automatic center point. The RUD ACP-Tornado's lift shackle turns in the load direction automatically when it is lifted, so it cannot remain in an incorrect position. Dangerous transverse loads and a sudden drop of the load are excluded, due to a unique spring mechanism.

**A practical feature of Max and Supermax versions is the deflector disc.**



With the relaunch, RUD has gone one step further in terms of working load limit (WLL), the company said. The smart ACP-Tornado lifting point is now available from M8 to M100 as well as ½ inch to 4-inches. This means that a suitable solution is now available for an even greater variety of applications, including extreme heavy-duty use.

A practical feature of Max and Supermax versions is the deflector disc. It is equipped with an angle marking and enables a quick, simple assessment of the current stop angle. As with smaller RUD ACP-Tornado lifting points, large versions have a universal bolt head with internal and external hexagon, which enables optimum handling. The bolt is captive, but still replaceable, which is useful in many applications. There is an adapted thread length for each dimension instead of a standard thread length across several sizes.

## Dual purpose

Modulift's Multi-Point is a strong, versatile lifting system designed to save rigging time and maximize use across multiple lifting applications. The system is designed and engineered for use as a semi-spreader or a lifting beam and is ideal for tandem lift operations and gives the user the power to lift across multiple points at varied spans.

Designed using the latest 3D Linear Analysis, and manufactured to BSEN 13155, the Multi-Point is engineered

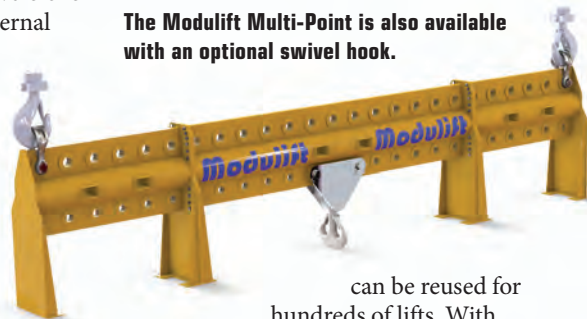
with multiple connection points on the top and bottom to provide flexibility for the beam to adapt to any situation – whether lifting a boat, reel, tank, turbine or anything else in between, the company said.

Featuring an adaptable and versatile modular design, the Multi-Point is ultra-portable and

**ACT** presents our annual roundup of the latest below-the-hook offerings across the industry and a wide variety of applications.



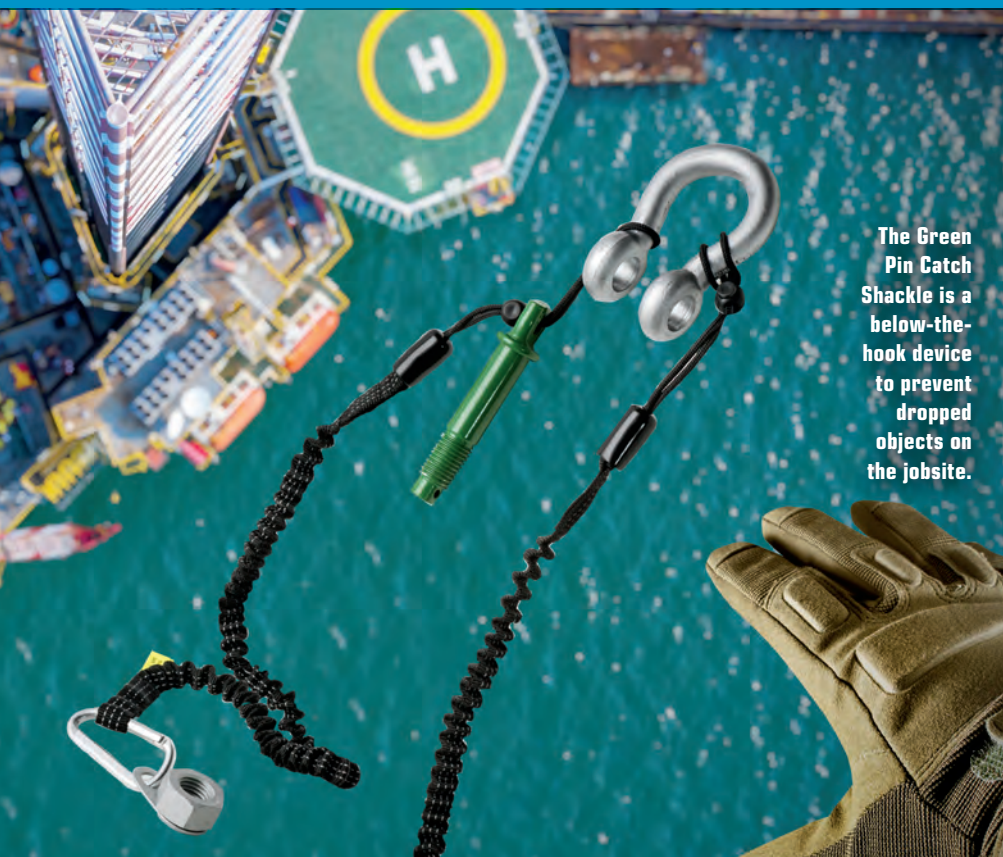
**The Modulift Multi-Point is also available with an optional swivel hook.**



can be reused for hundreds of lifts. With easily detachable components, the beam lifts at spans from 3 to 12 meters, with a lifting capacity from 12 metric tons right up to 600 metric tons. Featuring an optional 360-degree swivel hook and extended support stands, the Multi-Point is an option for tandem lifts with two cranes when there is only one lower lifting point required and rotation of the load is critical. The Multi-Point Beam can also be used as a semi-spreader to give a more balanced lift, or as a lifting beam when headroom is restricted.

## Width extension

Mazzella has engineered and manufactured a below-the-hook device for lifting coils in a vertical position. As the vertical lifting tong extends, the outer pads come together to press against the outer diameter of the coil, while the inner pads spread apart to press against the inner diameter of the coil.



The Green Pin Catch Shackle is a below-the-hook device to prevent dropped objects on the jobsite.

The outer pads are adjustable in 5-1/2-inch increments with the largest distance in the open state being 51-1/4 inches compressing down to 44 inches in the closed state. The inner pads are adjustable in 4-inch increments with the largest distance in the open state being 14-1/4 inches expanding to 20-1/4 inches in the closed state.

### Safety shackle

Dropped objects are a well-known safety hazard in the industry and have led to numerous accidents. Green Pin offers a unique solution to this problem: The Green Pin Catch Shackle BN prevents the accidental dropping of shackle bolts, nuts, cotter pins and even complete shackles, preventing injuries or deaths.

These shackles have an attachment point on each component to connect them to a lanyard. The Green Pin Catch Shackle BN has been developed in cooperation with DROPS, the non-profit organization that is focused exclusively on dropped objects prevention schemes. The Green Pin Catch Shackle BN is suitable for both one-leg and multi-leg systems and is available in a range with a working load limit from 2 tons up to 9.5 tons.

Mazzella manufactures vertical lifting tongs for coils.

### Locked and loaded

Peerless Industrial Group launched their IBC (Intermediate Bulk Container) Tote Lifter, ideal for lifting IBC Totes with an overhead crane. The IBC Tote Lifter is available to fit the standard 275- or 330-gallon container.

Additional sizes are also available.

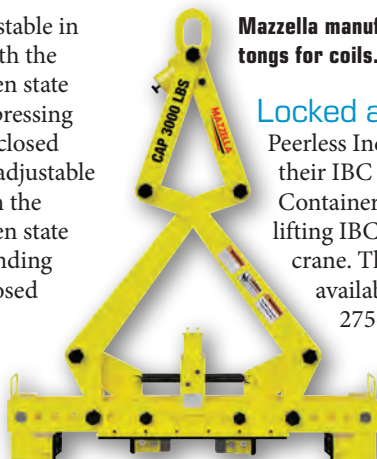
Operators are able to lower or traverse the lifter in place, straddling the IBC

Tote. The dual steel load bars slide under the IBC Tote through the designated pocket areas. The lower clevis design (openings facing inward) allows for the load bars to easily connect to the lifter with only one operator required for placement. Lower bars lock in place with the sliding T-handle pins at the four corners of the clevises. Each lower bar has elongated slots instead of holes, to make it easier for the operator to drop the T-handle pins in place.

### Fork to hoist

Lift-All's new patent-pending GripHook design converts a forklift into a lightweight overhead lifting device in a

COMPANY	BOOTH
ACT / KHL Group	1709
ADB - Hoist Rings Mfg.	509
Advantage Sales & Supply	1311
All Material Handling	1407
ASC Industries	406
Associated Wire Rope & Rigging	602
Ben-Mor Cables	1408
Bridon-Bekaert The Ropes Group	610
Cargo Control USA	503
Chant Engineering	1500
Chicago Hardware & Fixture	710
Cleveland City Forge	704
Columbus McKinnon	708
Cortland Company	507
De Haan Special Equipment BV	407
DOLECO USA	1405
DURABILT DYVEX	1818
Dynamic Load Monitoring (DLM)	1500
Elephant Lifting Products	1713
Elite Sales	402
Etiflex	1306
Gosan USA	504
Holloway Houston	1814
ITI	1310
J.C. Renfroe and Sons	1836
Jergens, Inc.	1308
KWS	609
LGH	1717
Liftex Corporation	502
Load Monitoring Systems	1507
MAGNA Lifting Products	1506
Meadowbrook Insurance Agency	1701
Miller Lifting Products	702
Modulift UK Ltd	1509
pewag USA	1611



All IBC Tote Lifters are proof tested to 125 percent capacity in accordance to OSHA requirements.




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Royal Van Beest	510
RUD Group	1838
Samson Rope	411
Sheave Source	412
Skookum, an Ulven Company	1708
Slingmax Rigging Solutions	1511
SC&RA	5
Suncor Stainless	1606
The Caldwell Group	1834
The Rubicon Group	604
Tiger Lifting Products	1711
Uniropes Limited	404
Usha Martin Americas	1305
verope USA	1304
Washington Wire Rope	1607
WireCo	1604
Wireropes Works	1406
Yoke Industrial	1411

**Skookum Master Links are Shell Offshore approved and made in the USA.**

matter of seconds. This is a must for contractors, manufacturing plants, power plants, distribution centers, rental houses and any other facility using fork trucks, the company said.

The self-gripping design allows the GripHook to tighten around the fork when a load is applied. The easy-to-attach GripHook does not require any tools to install. This economical solution is made from high-quality synthetic materials saving money without compromising lift capacity, according to Lift-All. Easy to install, lightweight and self-gripping, the GripHook turns a forklift into a hoist with options to lift up to 2-tons in a matter of seconds.

"The GripHook instantly turns any fork truck into a hoist, thus enabling increased production and better lifting efficiencies," said Jason Dively, vice president of sales, Lift-All. "The innovative design ensures safety while providing a versatile range of lifting options in a number of different environments."

### Forged links

Skookum alloy steel Master Links and Master Link Subassemblies are drop forged up to 1 ½ inches and robotically welded from 1 ¾ inches and larger. Skookum forged links are quenched and tempered, and offer superior grain refinement and ductility, providing superior strength, the company said. All links are marked in accordance with ASME B30.26. Skookum's proof test fixture design prevents localized loading per ASTM A952.

### Sling strength

Taurus Lifting Slings are the latest below-the-hook innovation from Samson. At the core is a multi-loop strength-optimized High Modulus Polyethylene (HMPE) sling, protected by a high-visibility braided polyester chafe body featuring non-



**Lift-All's new GripHook design converts a forklift into a lightweight overhead lifting device.**

weight-bearing braided HMPE chafe eyes. Flexible and lightweight with high strength and excellent abrasion resistance, these general-purpose lifting slings are essential to any lifting job, the company said.

Taurus Lifting Slings conform to ASME B30.9 and are rated for use with comparable hardware, such as shackles of equivalent strength specification. Slings are available with vertical Working

Load Limit (WLL) ranging from 30,000 to 400,000 pounds and are available in lengths from 10 to 50 feet (size dependent).

Each sling comes tagged with WLL for vertical, basket and choker configurations at a safety factor of 5.

>42



## PIE preview

The Association of Wire Rope Fabricators General Meeting & PIE will be held in Dallas, TX October 15-18.

### SUNDAY OCTOBER 15

7 – 11 a.m.

**Board of Directors Meeting**

**Remington Room**

10 a.m. – 4 p.m.

**Registration**

**The Grand Hall**

11 a.m. – 4 p.m.

**Product Information**

**Exhibition Set-up**

**The Grand Hall/**

**Dallas Ballroom**

5 – 5:30 p.m.

**First Timer's**

**Reception TBD**

5:30 – 7 p.m.

**Opening Reception**

**Austin Ballroom**

### MONDAY OCTOBER 16

7:30 – 9:30 a.m.

**Breakfast Buffet**

**The Grand Hall/**

### Dallas Ballroom

8 a.m. – 3 p.m.

**Product Information**

**Exhibition**

**The Grand Hall/**

**Dallas Ballroom**

9 a.m. – 2 p.m.

**New Product &**

**Technology SPOTLIGHT**

**The Grand Hall/**

**Dallas Ballroom**

11:30 a.m. – 1 p.m.

**Luncheon Buffet**

**The Grand Hall/**

**Dallas Ballroom**

6 – 7 p.m.

**Reception**

**Chaparral**

**Ballroom**

### TUESDAY OCTOBER 17

7:30 – 8 a.m.

**Networking Breakfast**

**The Grand Hall**

8 a.m. – 1 p.m.

**General Business**

**Dallas Ballroom BC**

12 – 2 p.m.

**Painting with a TWIST**

**On Property/**

**Room TBD**

1:15 – 2:15 p.m.

**Emerging**

**Leaders Meeting**

**Dallas Ballroom BC**

5:15 – 6:15 p.m.

**Reception**

**The Grand Hall**

6:15 – 6:30 p.m.

**Bus Loading**

**& Departure**

7:00 –

11:00 p.m.

**AWRF Gala**

**AT&T Stadium**

### WEDNESDAY

**OCTOBER 18**

8 a.m.

**Golf - Modified**

**Shot Gun Start**

**(weather**

**permitting)**

**Bus Pickup**

**at 7:15 a.m.**

4:30 – 6 p.m.

**Closing Reception**

**Remington Room**

**WHAT AWRF General Meeting & PIE**  
**WHEN** October 15-18, 2023  
**WHERE** Sherton Dallas, Dallas, TX

**[www.awrf.org/events](http://www.awrf.org/events)**



## Secure solution

Jergens has combined key features of its SP2000 and Shackle-Lok hoist rings for a new, productive and secure solution to die flipping. Two versions are offered – standard and Lift-Check – to ensure worker safety and required clearance. Die flipping is a standard process of rotating and inverting die plates for cleaning oils and metal chips as well as for routine maintenance.

“That is no small task given that these plates can be very large in size and weigh (up to) thousands of pounds,” said Chris Spada, Jergens LSG and SFG product manager. “First and foremost, when lifting anything of this nature is worker safety. To that end, Jergens manufactures its hoist rings to strict quality standards, proof tests each one to 200 percent of the load and then certifies them.”

Another matter of key importance is to maintain the structural integrity of the die plates. “One of the design drivers was to make sure users have (chain) clearance for things like die shoes and external plumbing that mount



**Taurus Lifting Slings are an off-the-shelf solution designed to reduce overall implementation time.**

off the ends,” Spada continued. Ensuring zero contact is critical to maintaining the precision and functionality of the die.

The side pull design has an offset neck and provides 360 degrees of swivel and 180 degrees of pivot to clear all die components.



**The additional clearance helps customers in their die-flipping applications.**



**Users can remotely operate the VLN device from distances up to 600 feet away.**

## Load stabilization

Vita Inclinata's Vita Load Navigator (VLN) is a solution for lifting and moving loads with precision, designed to improve load stability, optimize operational efficiency and enhance safety. The VLN is offered in standard models, which differ in size and torque, to match sites' unique lifting needs, as well as fully tailored builds and solutions. All models are semi-autonomous propulsion-driven devices that connect below the hook of the crane and are remotely controlled.

The VLN is capable of measuring more than 1,000 data points every second. The system detects load movement in real-time and utilizes high-powered fans to prevent issues like spinning, rotations and other problems that may cause injuries or damages at the site.

Operators can optimize load positioning

>45

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**Don't forget to inspect the hoist per ASME B30.21 recommendations as well as the manufacturer's recommendations.**

## Talking tools

The team at All Material Handling and Peter Cooke, president of National Rigging and Crane, have come up with a few tips to help decide on the right tool to use.

First, how much tension will you be putting on the hoist? Second, how are you anchoring the hoist to the load? Third, how much

clearance do you have? The three main factors here are:

- **Length** – the distance the lifting hook can travel between its fully lowered and fully raised positions.
- **Reach** – being equal to the difference in height between the hang point (top hook, pad eye, or pin) and the saddle of the hook in its lowest position.
- **Headroom** – the distance from the hang point and the fully raised hook saddle. For hoists with a top hook, the headroom dimension is the distance from the hang point of the top hook and the saddle of the fully raised lower hook.

and movement, significantly improving productivity on the jobsite. With the auto hold feature, they can keep loads in position in the toughest of conditions.

### Multi-point lifts

Lone Star Rigging's MULTIS Mod Bar was designed with flexibility and ease of adjustment in mind when making numerous multi-point lifts with varied

center of gravities and un-uniform lift locations, depending on weight and lifting point requirements. The MULTIS Mod Bar can be used as a single beam with varied and multiple pick points or as a frame with widths up to 30 feet. The lengths range from 20 to 90 feet.

Adjustments for CG end-to-end are made by shifting the lifting bells above each pick point so that the load is under the hook



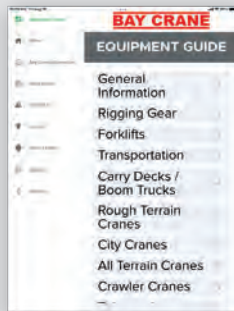
**The Mod Bar can be used as a single beam.**

for side-to-side offset CG. Adjustment is made by selection of the shackle position on the upper Mod Bars which keeps the CG under the hook. Number of pick points can be as few as four or as many as needed based on lifting lug or column locations. The MULTIS Mod Bar uses only the needed number of lift points, and the frame is positioned over the center of gravity. It saves man hours in rigging adjustment from one lift to another, prevents the need for custom sling lengths, minimizes head room, rigging weight and reduces assets on site.

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# Here today,

In Chicago, it's practically a cardinal sin to dress your hot dog with ketchup at Wrigley Field. But in Pittsburgh, it caused quite an uproar for football fans when an iconic ketchup statue left the Steeler's football stadium.

A tremendous part of the Pittsburgh, PA sports culture, and synonymous with Heinz Field, were two giant statues of ketchup bottles hung above the scoreboard, also known fondly as the "red zone." But when naming rights changed hands and the arena became Acrisure Stadium, the condiments needed to come down, and Steffan Industries stepped up.

The company was tasked with assisting Laurel Print & Graphics on the relocation, renovation and installation of one of the bottles. Transporting the famous landmark required discretion, as it was being outsourced to be refurbished at Precision Body & Service in Pittsburgh's South Hills. Due to the unique shape and status of the memorabilia, it was taken to an auto group that had the capability to fit

Steffan Industries was tasked with the transport of an iconic piece of Pittsburgh sporting history.

the bottle in one of their paint booths.

"It originally was requested for crane service, and everyone just kind of automatically defaults when they see something big that needs to be lifted that a crane needs to be involved," said Sandy Steffan, vice president, Steffan Industries. "But once we saw everything that was going to be involved with it, from trying to transload it from the trailer into the paint booth in the tight space, a crane just wasn't appropriate. We had two Hyster S120 12,000-pound forklifts with rigging booms on them. In essence, we kind of used those as mini cranes and performed a tandem lift."

## A work of art

Whenever the bottle needed to be flipped to paint the opposite side, it had

to be pulled out and rotated so they could access the opposite side of it. The Steffan Industries team returned, brought the same forklifts back and maneuvered the bottle, flipped it over and then put it right back in.

"It was slightly more challenging when the bottle came back out, even though we used the same equipment," added Steffan. "We had different touch points because it had its new paint finish and all that. Initially, we could use nylon slings and your lifting points didn't necessarily matter. But after all the work was done, it was an extremely well-done paint job and graphics finish. It was just really a work of art."

In order to maintain the integrity and the perfection of the work that had just been done, the Steffan Industries team had to use a little extra caution to make sure that anything that potentially touched it had extra padding,

Additional exterior support braced the bottle on the Transcraft stepdeck.





# gone tomato

and additional exterior support braced the bottle on the Transcraft stepdeck trailer.

“There was a lot of head turning that morning, seeing a 33-foot foot ketchup bottle going down the road, when it was still dark out and people were still drinking their coffee and trying to wake up,” said Steffan with a chuckle.

And as the convoy encountered Steelers fans on their morning commute, the team was met with cheers from rolled down windows and fist pumps in the air.

The refurbished bottle was returned and reinstalled above Gate C of the stadium, now known as Heinz Gate, and peace was restored in the Steeler’s fandom.

## Industry awareness

Steffan said one of her favorite parts of the entire project, besides involvement as a small family business, was being able to

help draw attention to the industry.

“I just think it’s really important to help children and the rest of the public see the fun part of crane, rigging and transport,” she added. “We really do something different all the time, and every job that you go to is unique. There’s always different ways of looking at things, and different ways of performing the work. We

don’t ever just show up somewhere and do the same thing every day over and over and over again.”

Steffan Industries will also be contracted for the transport and installation of the second bottle to the Heinz History museum in downtown Pittsburgh. ■

Steffan Industries performed a tandem lift on the bottle with Hyster S120 forklifts.



Final installation was performed by Century Steel Erectors, with SII providing rigging support.

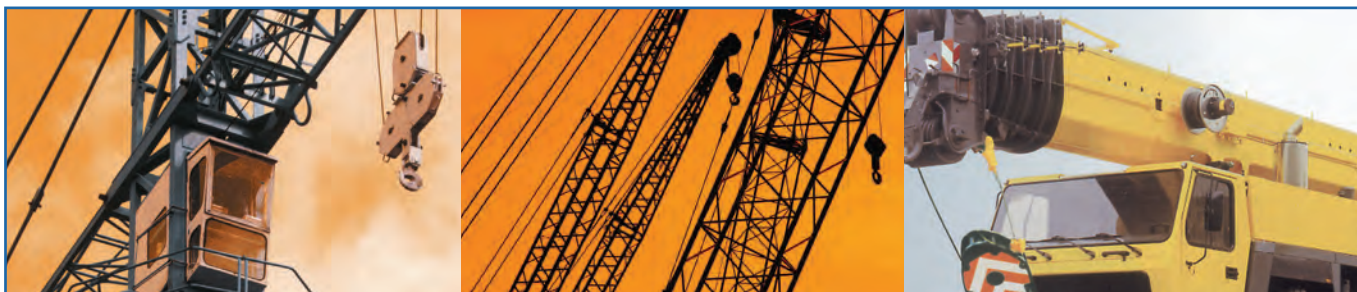


“ There was a lot of head turning that morning, seeing a 33-foot foot ketchup bottle going down the road, when it was still dark out and people were still drinking their coffee trying to wake up. ”

SANDY STEFFAN, VP, Steffan Industries







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# Establishing a standard

FMCSA examines safety and maintenance.

**A** new survey and study out by FMCSA plans to take a look at what improvements would enhance motor carrier safety by focusing on vehicle maintenance.

According to an official register notice published by FMCSA on September 1, the goal of the study is to determine what improvements, ranging from better compliance interventions to better vehicle maintenance requirements, would enhance motor carrier safety.

The agency pointed to a 2014 study conducted by the (USDOT) John A. Volpe National Transportation Systems Center which analyzed FMCSA's Safety Measurement System (SMS) and how it

identified the highest-risk motor carriers targeted for interventions. The study ultimately revealed that motor carriers targeted for intervention due to vehicle maintenance violations had a 65 percent higher crash rate compared to the national average – based on federal and state inspections of components critical to the safe operation of the vehicle.

But a number of questions also emerged from the study. One involved a conclusion that described how proper and regular preventative maintenance – i.e., systematic programs among carriers – versus federal and state inspections, which are limited to mostly visible or safety-related components, should remain the standard. The question spotlights a regulatory stipulation that states every carrier must have a program to "... systematically inspect, repair and maintain, or cause to be systematically inspected, repaired and maintained, all motor vehicles and intermodal equipment subject to its control."

The problem, determined FMCSA, is with the word systematic, which they deemed subjective, and likely to vary from one carrier to the next. It was also determined that the lack of specificity in this regard – concerning standard intervals for preventative maintenance – makes it difficult for federal and state personnel to evaluate the effectiveness of and compliance with a carrier's maintenance program. Further, it may make it difficult for carriers to ascertain and therefore comply with the regulation's intent.

## Minimum standards

Consequently, the new survey/study's objectives include:

- Developing an operational definition of "systematic maintenance."
- Evaluating whether current regulations and the intervention process could be modified to improve compliance with such vehicle maintenance requirements as preventative maintenance intervals, and preventative maintenance inspections with adequately trained mechanics and adequate maintenance facilities.
- Gathering information to assist in establishing minimum standards

for inspection intervals, mechanic qualifications and training and certification of maintenance facilities.

The Virginia Tech Transportation Institute at the Virginia Polytechnic Institute and State University (under contract to FMCSA) will administer the study by using online surveys across two phases.

Phase I comprises a voluntary seven-question online recruitment survey that will screen carriers and verify their eligibility for Phase II participation. Phase II calls for a voluntary 108-question survey, and includes questions about demographics; maintenance practices, intervals, personnel and facilities; and state and federal inspections.

Phase II will also provide additional information about maintenance personnel and facilities, mechanic training levels, tools required for adequate inspection, certification of facilities and vehicle maintenance issues that may impact safety. The results, said FMCSA, will be documented in a technical report and published.

In a public statement, FMCSA maintained: "In addition, the results will be used to create a 'recommended best practices' report that will outline minimum standards for inspection intervals, mechanic qualifications and training and certification of maintenance facilities."

The agency also indicated that, without such a data collection, both the truck and bus industry will continue to operate without a proper understanding of what a "systematic maintenance" program actually is. In turn, federal and state inspectors will struggle to evaluate the effectiveness of a carrier's maintenance program or its compliance with this provision – resulting in added difficulty for carriers to comply with the regulation's intent.



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# Getting down to

2023 was a productive year of rollouts for SC&RF.

The Specialized Carriers & Rigging Foundation (SC&RF) was formed in 1986 and comprises a 501 (c)(3) organization whose mission it is to support SC&RA member companies through scholarships and grants, research and education and workforce development initiatives. SC&RF is sustained by financial contributions from member companies and individuals, as well as fundraising efforts at SC&RA meetings. Association members are encouraged to join the Foundation's volunteer committees in helping to shape the future of SC&RF as well as the overall industry.



in on a quarterly basis to review activities and points (the company with the most points for each category will be recognized and awarded – categories are based on number of employees); by featuring all winners in American Cranes & Transport magazine as well as recognition at the SC&RA Annual Conference Closing Night Awards Ceremony; by making each winner eligible for the “2023 Workforce Ambassador” award; and by highlighting winners on the Lift & Move website and social media platforms.

“This program has really gained momentum in 2023,” indicated SC&RF Director Jackie Roskos. “The reality is, the industry needs as many representatives as we can get out there telling people about career opportunities. Especially since we are such a niche sector of the industry. The future workforce has to at least be exposed to the opportunity, to know what it is, before they can pursue a career in this trade.”

Roskos added that most people aren't even aware of



the heavy haul side or crane and rigging, and the additional steps it takes to find employment therein. “Companies really need to have access to this information at the forefront of their recruiting, and that's what this program is designed to do.”

Jonelle Anderson, director of business development and marketing at BOSS Crane & Rigging, as well as chair of the Lift & Move Committee, echoed Roskos.

“We're steadily developing the communications lines with this program to let people know what it's about,” she noted. “We can't just sit back and watch the workforce disintegrate – we have to develop some type of recruitment process.

Not only to recognize all these companies that have a productive method, but to support the ones that need help.”

Anderson acknowledged that the intent of the program is not to get in the way of a company's recruitment methods, but assist as needed, and share what works. “It

allows us to take success stories from some of the more established programs and potentially educate smaller companies that don't have one, or companies of any size looking to develop something.”

Kelan Bragg, general manager at Bragg Companies, and vice chair of the Lift &

One such way to support SC&RA is through the Endowment Fund, which allows contributors to take part in a structured giving campaign that allows them to earmark funds for their program(s) of choice or to allocate funds to the General Endowment Fund to benefit all programs.

## A rollout year

As for what the Foundation has been up to, if 2022 was considered mostly developmental in practice, then 2023 has been the rollout year. And high on the list of priorities among an assortment of rollouts is the Lift & Move Workforce Ambassador Program – which brings together companies of all sizes to participate in activities focused on building industry awareness and fostering community relationships in order to bridge the skilled-labor gap and ensure a future workforce.

Ambassadors within the program receive a host of benefits, including marketing tools and resources created to promote the industry, a company listing on the Lift & Move website, photo gallery access, a Workforce Ambassador certificate and an opportunity for quarterly (virtual) meet-ups to discuss best practices and share success stories.

Lift & Move will also recognize ambassadors in various ways: by checking



**Jackie Roskos,**  
director of SC&RF



**Jonelle Anderson,**  
BOSS Crane & Rigging



**Employees from Steffan Industries participate in a hand-signals exercise during a career day at Central Elementary School in Elizabeth, PA.**

# business



**Brittany Bachman, Boulder Industrial Contractors**

Move Committee, sees the Workforce Ambassador Program as a “lift all ships” scenario. “We’re all drawing from the same pool,” he said. “The more people in the pool, the better for the industry. So if you’re safeguarding secrets and you’re keeping people from having access to a great career, I think that’s detrimental to not only yourself, but the industry as a whole.”

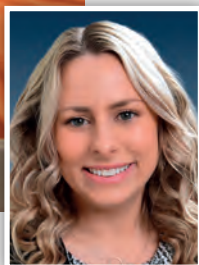
Brittany Bachman, marketing manager at Boulder Industrial Contractors, also a program participant, agreed. “It’s more critical than ever that we come together to learn how to address the labor shortage and help the industry thrive,” she said. “I’ve seen the power of community engagement through the Lift & Move program – and these efforts only strengthen the industry and raise awareness of the trades for the next generation.”

The Foundation is planning an even bigger push on the Workforce Ambassador Program in 2024. The Lift & Move program is supported by SC&RA, the NCCCO Foundation and media partner, KHL Group.

## Expand the market

SC&RF’s 2023 educational assistance efforts continue to create opportunity for countless SC&RA members. Vo-tech and partner-in-education scholarships benefit individuals pursuing training, certification or continuing education

## Committed to the Workforce Ambassador Program, Boulder Industrial Contractors involves next-gen workers at a public Career Day.



31 and December 31.

An exciting new addition to these opportunities is the Company Training Grant, which SC&RF rolled out this year and designed to help companies cover the cost of sending employees out to training, or bringing in a trainer.

Mike Mitchell, crane superintendent at L.R. Willson & Sons, was able to reward three of his employees with \$1,000 each towards CDL Class A training courses. “I saw the opportunity online and applied for it right away,” he explained. “It’s huge for us – we run a crane crew with twenty-two crawler cranes that we move just about every day, and these three young guys are

**Jacquelyn Valek, Tesar Industrial Contractors**

through vocational/tech schools, community college, etc., and range from \$500 to \$5,000. Seats with Morrow Equipment Company, ITI and CICB are available for 100 percent tuition for those who apply through the vo-tech application. Scholarship deadlines (awarded to an individual) are set for October



**Steven Bruce was one of three employees at L.R. Willson & Sons who completed a CDL Class A training course thanks to a SC&RF Company Training Grant.**

part of that crew. It’s huge for them too; it helps these guys excel not only through their training, but their pay jumps up as well. Overall, this grant has put three guys into the workforce who otherwise wouldn’t have been able to get there due to expenses.”

Similar to L.R. Willson & Sons, member company Tesar Industrial Contractors was also able to pay for CDL Class A training – for two of its employees – thanks to the Company Training Grant. “We were really looking for an opportunity to invest back into our employees, and we realized this would be a game changer for us,” said COO Jacquelyn Valek. “Carrying a CDL



driver is critical for us – it enables us to get out there and expand the market and service our customers more rapidly. To be able to use the grants for something that is specific to our industry and our needs is enormous.”

*For more information, visit: [www.scr-foundation.org](http://www.scr-foundation.org)*

## ALL HANDS ON DECK

SC&RF released its “State of the Workforce in the Crane, Rigging and Specialized Transport Industry” white paper this year. After two years of comprehensive research and analysis, the first-of-its-kind paper was designed to examine and identify a range of workforce issues within the construction and specialized transportation sectors.

Ultimately, 64 companies completed the survey, which resulted in 83 sector-based responses – comprising a productive range of assessment areas, including: In-Field/Operations Occupations, Maintenance, Apprentice/Trainees, Operations Management and Corporate Positions. Within these categories, the survey focused on education, wage range, length of employment and additional issues to address.

The Foundation needs member participation for the 2024 Survey. All member companies are encouraged to complete this seven-minute, anonymous survey to strengthen SC&RF’s ability to understand, address and positively impact the skilled-worker shortage.



20  
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CCO is updating  
its practical exam  
administration process  
leveraging the latest  
technology.

**Practical Exam Proctors will use tablets to record exam performance instead of paper.**



# Practical scoring speeds up

**C**CO is nearing completion of field testing a new tablet-based solution for practical exam administration. This solution will result in candidates receiving their practical exam scores in significantly less time than they do today.

CCO's current system uses paper score sheets that must then be scanned and sent back to CCO for manual processing, meaning results for the candidate may not be received until weeks after taking the

exam. The manual process causes delays in scoring and issuing certifications, and in some cases preventing candidates from going to work.

## Available in January

Starting on January 2, 2024, Practical Exam Proctors (PEPs) will be able to record candidate performance via a tablet rather than on a paper score sheet. The system used to record candidate performance will also score the exams and will allow candidates to receive exam results in a day or less; this is a drastic improvement from the current timeline, which can take up to 22 days following the exam when using paper score sheets.

"This is one of the most exciting improvements at CCO to date—we will be able to vastly reduce the amount of time it takes to get certified from nearly month to just days," said CCO CEO Thom Sickelsteel.

While PEPs will not be required to use the new system until July 1, 2024, candidates who need to certify quickly may ask their proctors if they will be using the new system, so they know what timeline to expect for their score report.

## Benefits and efficiencies

In addition to the major improvement to score reporting time, the new practical exam process will allow for real-time authentication of credentials for those administering the exams, practical test sites' registration status and candidates' authorization codes for testing. This is expected to reduce administrative issues related to exam administration and increase program integrity.

Also with the new process, candidates will be able to confirm that the test administration has been authorized and approved by CCO. This new development is another step CCO is taking to improve speed and responsiveness.

## Streamlining certification

CCO is reducing the number of exams required for earning CCO Lift Director to make certification more accessible.

Effective January 15, 2024, candidates will have just two exams—a Lift Director Core exam and a Lift Director Specialty exam—to earn certification, so they can earn certification faster and save money.

For instance, Mobile Crane Lift Director candidates will be required to pass only two exams instead of the six required currently; this represents a reduction in testing time from 7.5 hours to 2.5 hours. Similarly, Tower Crane Lift Director candidates will see a reduction in testing time from 4 hours to 2.5 hours. Due to this reduction of exams and length of hours required to test, candidates will have 12 months to complete all certification requirements instead of the 24 months currently allowed.

CCO made these changes only after conducting a psychometrically rigorous job task analysis of the Lift Director occupation in 2022–2023, followed by an industry-wide survey regarding the importance, frequency, and applicability of the task and knowledge areas identified during the job task analysis.

Candidates currently in the process of becoming Lift Director certified will need to complete certification using the current requirements. Going forward, current CCO Lift Directors needing to recertify will only need to take and pass the Lift Director Core exam and the applicable Lift Director Specialty exam. Existing Lift Director certificants will be able to add a specialty simply by taking the applicable Specialty exam.

**Lift Director certification will be significantly streamlined, costing less time and money.**







# ANAB accreditation

CCO's accreditation to the international ISO/IEC 17024 standard sets it apart.

**T**he ANSI National Accreditation Board (ANAB) Personnel Certification Accreditation Committee has voted to grant CCO continued accreditation for 2023–2024. CCO is recognized by ANAB as certification body #0756, meeting the international ISO/IEC 17024 standard for organizations that certify personnel. This is the highest bar of accreditation available to certification bodies.

## Rigorous process

ANAB requires a comprehensive report annually documenting program performance and internal procedures, and grants continued accreditation only if all requirements are met. ANSI requirements are rigorous and designed to give assurance to those who depend on certification programs that the tests are fair, sound, and valid assessments of the knowledge and skills they are intended to measure. As a result, ANSI accreditation demonstrates that CCO's nationally recognized and administered programs have been developed—and are maintained—to the highest standards of integrity.

CCO received its first ANAB accreditations in 2007, and additional accreditations have been progressively awarded as new programs matured with a total of 18 programs accredited today.

The ANAB assessor spent two days at CCO's Utah office, reviewing more than 4,600 pages of documentation submitted in response to ANAB annual surveillance requirements. The ANAB assessor also



witnessed a practical exam demonstration and tried their hands at an Online Proctored Testing (OPT) written exam to get a feel for CCO's new exam delivery platform.

Overall, the assessor was thoroughly impressed with all of CCO's new systems. As a result of guidance provided by the assessor on exactly what ANAB requires to comply with the standard regarding the agreement that candidates and certificants are required to sign, CCO has updated its Code of Ethics (see below).

## Why is it important?

Third-party accreditation is a crucial differentiator between CCO certifications and other options, whether those be another certification or a qualification. The international ISO/IEC 17024 standard for organizations that certify personnel is world-class and unsurpassed in terms of acceptance and portability.

Certification of persons to the ISO/

IEC standard assures that the certified person has been evaluated and assessed by a neutral, third-party body through a rigorous process and found to have the knowledge and skills to perform competently.

Accredited certification places an emphasis on the process to develop the exam as well as psychometric analysis of the performance of the exam. These steps ensure that the exams are valid, reliable, fair and legally defensible.

There is no other higher standard. Employers can rely on the certification and are not exposed to questions over the validity or fairness of the exam.

Third-party accreditation also ensures that CCO follows practices that are fair to candidates and certified persons. It confirms that candidates are provided due process throughout the certification process and that concerns, complaints and appeals are handled by the certification body in a fair and expedient manner.

## Accreditation benefits

For candidates, portability and nationwide acceptance are additional benefits of CCO's accredited certification. Not only does accreditation create portability, but it assists in differentiating the skill level of individuals through a nationally accepted program.

Ultimately, third-party accreditation speaks to the quality of CCO and the certifications it issues. It is just one of the reasons CCO has become known as the gold standard for those in and around load handling equipment. ■

## Code of Ethics

As a result of guidance received during ANAB's annual surveillance, CCO has updated its Code of Ethics to meet ANAB requirements for the agreement between CCO and candidates/certificants more closely. Specifically, candidates and certificants are now restricted from using their certifications or evidence of certification in a misleading manner or making claims regarding certification that go beyond the scope for which certification has been granted. Further, they may not use their CCO certifications in such a manner as to discredit CCO, nor may they make any statement regarding their certification which CCO considers misleading or unauthorized.



CCO has updated its Code of Ethics.

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# Navigating yearly insurance renewal

**Lauren Fronczek** discusses tips to streamline the insurance renewal process.

**Y**our insurance renewal. Your favorite time of the year, right? In reality, it is more likely a time of the year that you are not looking forward to. Nobody likes surprises, waiting until the 11<sup>th</sup> hour for quotes or an overly complicated process. Trust me when I say insurance carriers appreciate a seamless renewal as much as you. With ample timing, there are practical and proven risk financing tips that will help you earn the best results.

**LEAN ON YOUR INSURANCE ADVISORS:** You are running a crane & rigging company and should depend on your advisors to help navigate the complex waters of the insurance market. It is critical to work with a specialist who can provide the best options for you. You may decide that you'd like to consider multiple options for your upcoming renewal. Many specialists may not recommend "shopping" your insurance every year as there is something to be said for loyalty and building a relationship with your insurance carrier. However, there are a variety of reasons that may lead you to a decision to look at alternates. If you decide to look at multiple options, your broker will approach markets with your submission 60 to 90 days prior to your renewal. One critical piece that you can arm your broker with is putting together a narrative to highlight different aspects of your operation.



## THE AUTHOR

**Lauren Fronczek** is AVP of specialty transportation for National Interstate Insurance Company based in Richfield, OH. National Interstate Insurance is

rated "A+" (Superior) by A.M. Best (rating affirmed on December 16, 2022.)



**START EARLY:** Don't lose sight of your policy's expiration date. Did you know that most insurance carriers usually start planning for your insurance renewal 90 days prior to your current policy's expiration? During that time, the insurance carrier will assess how your performance has been. Are there claims issues that need to be addressed? Perhaps claims are being reported more than two days past the date of loss. If that is the case, they will want to understand the reasoning and work with your team to improve claim reporting time. Or maybe there was an uptick in claims this past year. The insurance carrier will want to understand what is driving the increased frequency. These are only a few examples of what may be reviewed when developing an approach for your upcoming renewal.

About 60 to 90 days prior to your renewal, your insurance carrier is most likely having conversations with your broker to set high-level expectations going into the next few months. While the strategy may be altered over the next few months, it allows them to be on the same page directionally. Did you know that every state has different notice provisions and requirements? One of the driving factors to setting a strategy is to ensure that the insurance carrier is complying with state law requirements regarding notification on your upcoming renewal.

**REVIEW YOUR CURRENT POLICY AND EVALUATE YOUR BUSINESS NEEDS:** With your insurance broker, review your existing

policies; pay attention to coverage limits, deductibles, policy endorsements, and any changes or updates that may be necessary. Consider any changes in your business operations, size, or assets and assess any new risks or exposures that may have emerged since your last renewal.

**GATHER UPDATED INFORMATION:** Having a close working relationship with your insurance broker is critical as they will work with you to prepare any updated information that may be required. While it could feel overwhelming at times, aim to get information back to your insurance broker as soon as possible. Identify someone on your team who will be the responsible party when it comes to information gathering and work with your broker to set realistic expectations. Many times, outdated information and unresponsiveness can drag out the process. An underwriter will be able to provide the most accurate pricing when given the most recent information. If an underwriter has an in-depth understanding of your exposures and risk appetite, they may be more willing to provide new and unique risk financing options.

**THINK RISK FINANCING, NOT BUYING INSURANCE:** The savviest insurance buyers take into consideration how they are going to manage risk over a time horizon much longer than a 1-year insurance contract. They consider how they will balance collateral and cash flow by analyzing and understanding the ways in which large deductibles, varying retentions, captives or





other insurance products will impact their business over time. Often a cheap, short-term option may be attractive at first, but may lead to years of heartburn. Stop buying insurance year to year and focus on how to control risk over time.

**TAKE THE RIGHT AMOUNT OF RISK:** Work with a seasoned insurance professional to evaluate how much risk a company of your size should take. What risk can you control and should be retained, and what risk should you transfer? Understanding this distinction can help reduce your overall cost of risk. The willingness to bet on yourself opens a world of possibilities when it comes to creative risk financing options. Don't wait until your insurance renewal to get educated on the different options available; work with your broker to explore and learn about options that you may want to consider depending on your risk appetite.

**DEVELOP STRONG RELATIONSHIPS DURING YOUR POLICY PERIOD:** Ask your broker to facilitate a meeting with your current insurance carrier well in advance of your renewal. Ask what influences pricing decisions, and how you can improve as a risk in their eyes. Address any concerns

the insurance company personnel may have, and work on developing a healthy relationship so you are best positioned for renewal. Maintaining close contact with your insurance broker throughout the renewal process is important to help avoid surprises.

**FOCUS ON CONTINUOUS IMPROVEMENT:** During your policy period, work with loss control resources to help improve your operation rather than viewing them as a hindrance. At many insurance carriers, including National Interstate, a consultative approach is taken to help you implement new best practices and hopefully, have some quick wins. There are many practices that will help you become a best-in-class risk and an expert insurance broker and specialty insurance carrier can help you decide which practices will have the greatest impact. The sooner you identify which practices you want to implement, the better position you put yourself in the future.

Embrace technology. Many insurance carriers have identified the use of telematics data as the next frontier. National Interstate understands the importance of this technology and has

for many years been at the forefront of telematics innovation when we began offering subsidy programs for eligible insureds.

**QUESTIONS ARE ENCOURAGED:** Most insurance carriers, including National Interstate, want to make sure that you understand the different options presented. Your insurance broker will work with you to highlight the differences in programs you are considering, so don't turn down the opportunity to be educated on something that may benefit your operation in the long run. Work with your insurance broker to weigh your options and make a decision on what route you would like to go for the next policy term.

By being proactive from a risk management standpoint and focusing on intelligent risk financing, you will set yourself apart and turn risk into a competitive advantage. Having advisors who understand the complexity and uniqueness around crane, rigging & specialized carriers is also a critical component. While the renewal processes may differ depending on the insurance provider, regardless of the program or product, communication is key. ■

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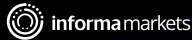
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# Bardonaro named CEO

Industry veteran Frank Bardonaro has been appointed CEO of Mississippi-based Yak Access. Bardonaro has held a variety of executive leadership positions across the industry, working for Maxim CraneWorks, AmQuip Crane, Terex Corporation and most recently, ArborWorks.



**Frank Bardonaro**

Prior to joining the Yak Access team as CEO, Bardonaro was the president and COO of Maxim, the largest specialty lifting company in North America. "For me, to get back into this specialty services/industrial space, while still working with the same customers and companies and footprint that I've worked in for 40 years, I just thought it was a great fit," said Bardonaro. "The culture and leadership in place at Yak is incredible and being around a private equity firm that I have a lot of confidence in is extremely important to me. Most importantly, I have been familiar with the Yak team since 2018 and this team has put the company in a position

to continue and increase as the #1 provider of access matting in the country."

In addition to Yak's focus on power, pipeline, renewables and industrial customers, Bardonaro will also be focused on expanding Yak Access into the crane and rigging space. At presstime, Yak Access was in the process of hiring a vice president of the crane and rigging division.

"Joel Weaver, our COO and our entire team is focused on expanding our geographical footprint and customer diversification," said Bardonaro. "We know there's a big market there, and Yak has the leadership, fleet and footprint to become the leader in the space."

# DICA appoints strategic advisor

Ingo Schiller, a crane industry executive with experience in sales, distribution, product development and marketing, has joined DICA as a strategic advisor.

"We are thrilled to be working with Ingo and leveraging his deep knowledge, experience and relationships in the lifting industry as our strategic advisor," said Kris Koberg, CEO, DICA. "The opportunity to work with Ingo comes at the right time as we continue to expand our

operations and product lines."

Schiller will help DICA expand its distribution programs, advising the sales team and expanding previously established DICA-OEM partnerships.

He got his start in crane repair in the late 1980s and later gained manufacturing-industry experience that included process-flow analysis and quality-improvement identification. Schiller has held executive positions with Liebherr, Manitowoc and



**Ingo Schiller**

Tadano. He has served in volunteer leadership positions with SC&RA and AEM.

# Michelson joins XL Specialized team



**Shane Michelson**

XL Specialized Trailers has named Shane Michelson as director of sales. With an extensive background in engineering and sales in the heavy haul trailer industry, Michelson brings a proven track record of driving growth, the company said. Most recently, he was a district sales manager at Trail King Industries.

"I'm truly excited to be part of XL Specialized Trailers and build upon the incredible momentum the company has gained in the heavy haul industry," said Michelson. "The brand's exceptional culture and dedicated team present an exciting opportunity for further growth."

Tom Hiatt, who previously held the position of director

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**Aspen Equipment**, a division of MGX Equipment Services, promoted

**MARCUS "SHANE" DAVIDSON** to the director of sales position. In his new role, Davidson will oversee all sales personnel at Aspen and lead the company's service growth initiatives.



**JACOB "JAKE" MASSMAN** has been named district service representative of the upper

mid-west United States, and central and western Canada, for **Link-Belt Cranes** field service department. He has seven years of experience in erecting and troubleshooting cranes in the lifting equipment industry, most recently working as an erecting/troubleshooting technician with a large crane company.

of sales, has been promoted to senior director of sales.

"Shane's remarkable background in engineering and sales, coupled with his passion for driving growth, align perfectly with our commitment to excellence," said Hiatt.



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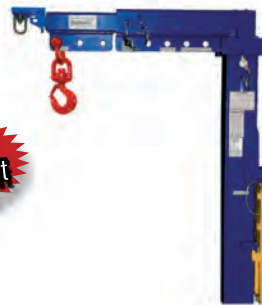
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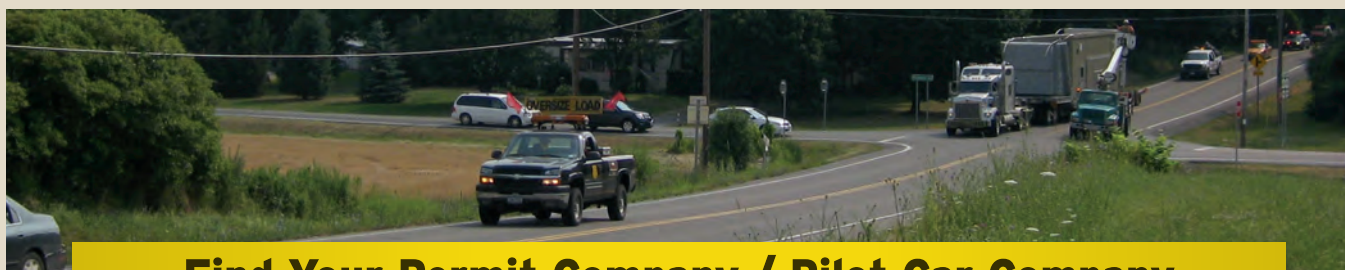


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# Monumental



PHOTO: US NATIONAL PARK SERVICE/  
KEVIN DALEY

Moving components of the Statue of Liberty is a painstaking process. The original torch and a model of Lady Liberty's face were loaded onto a trailer and moved to the Statue of Liberty Museum.



PHOTO: US NATIONAL PARK SERVICE/NPS GOV COLLECTION

Statue and monument rigging are among the most newsworthy jobs in the industry. Moving, rigging and installing a new or vintage statue, monument or object of art requires extra special care and concern. If it's a vintage piece, there are often many unknowns because the original details of the relic have been lost or no longer exist.

Monument and statue work often involves restoration or rehabilitation, making the work even more tedious. Such was the case with the refurbishment of the Statue of Liberty in the mid-1980s. Lady Liberty's torch had been badly damaged and needed to be replaced. A crane was used to take down the old torch and install the new one. The new torch was fabricated just like the original one, using the same plans and identical structure. The new and old torch are more than 16 feet tall and weigh 3,600 pounds.

More recently, the original torch and a replica of the statue's face were hauled to a new museum on Liberty Island by Phelps Construction. It was a tedious job getting the torch out of the storage area where it had been kept since the mid-1980s.

Marco Crane & Rigging lifted and installed the largest cantilever bronze animal statue in the world at the San Diego Zoo.



PHOTO: EXPERT HOUSE MOVERS



The Cape Hatteras Lighthouse was moved by Expert House Movers, which received a SC&RA JOY award for the project.

Michael Phelps and a crew of 15 moved the 3,600-pound torch, made of copper and amber glass, from one side of Liberty Island to the other.

"The issue here is it's a precious treasure for our country," Phelps said in news reports. "This is not the most difficult thing we've ever moved. But certainly, it's the most important."

## Kid gloves

The Liberty Bell is a sacred artifact in U.S. history. When it is moved, it must be handled with kid gloves. George Young Company, now a division of Mammoet, has moved many statues through the years, including Robert Indiana's LOVE statue, the "Rocky" sculpture and the 103,000-pound Anthony J. Drexel statue, among many others.

George Young Company moved the 2,080-pound Liberty Bell in 1962 and 2007. One of America's most enduring symbols of freedom, the big challenge for movers of the bell was to not damage the bell's famous crack. According to news

Statue and monument moving requires highly sensitive rigging and an extreme attention to detail.



PHOTO: CURT SUPLEE, NATIONAL SCIENCE FOUNDATION

The Liberty Bell hangs after being hoisted out of its supports. Protective padding separated the strap fabric and the bell metal.



Emmert International transported 340-ton rock 105 miles to Los Angeles County Museum of Art.

reports, sensors were attached to the crack. Alarms would go off if the crack got bigger.

Emmert International is another company that has expertise moving rare statues and the like. Moving a 340-ton boulder on a 105-mile journey through four counties and 22 cities required years of planning. Emmert worked with WCS Permits and Pilot Cars to move the boulder from Riverside County to Los Angeles. Commonly referred to as "The Rock," the boulder was installed at the Los Angeles County Museum of Art in early 2012 for the starring role in the "Levitated Mass," a sculptural installation piece conceived by Michael Helzer.

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